Distr.
GENERAL

GC.6/19
15 September 1995

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Sixth session
Vienna, 4-8 December 1995
Item 10 (e) of the provisional agenda

REGIONAL PRIORITIES AND PROGRAMMES: EUROPE AND NEWLY INDEPENDENT STATES

UNIDO activities in Europe and the Newly Independent States of the former Soviet Union

Report by the Director-General

Summary

Reports on recent trends in countries of Central and South-eastern Europe and the Newly Independent States of the former Soviet Union (NIS) and on activities carried out by UNIDO in 1994 and the first half of 1995 for the benefit of those countries.

CONTENTS

		Paragraphs	*Page*
Introduction		1 - 2	2
Chapter			
I.	A DIFFICULT TRANSITION — A MODEST OPTIMISM	3 - 5	2
II.	UNIDO SERVICES	6 - 17	2
III.	ACTION REQUIRED OF THE CONFERENCE	18	4

V.95 56705 (E) (h:\1995\pmo.9)

Distr.: 25 September 1995

Introduction

1. A report on the activities carried out by the Europe and NIS programme of UNIDO in 1994 was included in the Annual Report of UNIDO for that year (IDB.14/10, chap. III.E). The present report provides an update of that text to reflect developments that took place in the first half of 1995.

2. The Europe and NIS programme of UNIDO covers the region of Central and South-eastern Europe encompassing 15 countries ("Europe"), together with the 15 Newly Independent States of the former Soviet Union ("NIS"). Most of these countries have moved towards market-based economic policies and desire increased integration in the global community. Recent economic developments thus reflect the transformation of past systems, institutions, modes of production and patterns of economic exchange. The degree of success in the progress of economic and industrial transition has varied widely, depending to a large extent on the risk-taking attitude of decision makers, the flexibility of the industrial labour force, the scope and quality of the institutional framework, and the capacity of the economy to adjust itself to the requirements of new markets.

I. A DIFFICULT TRANSITION — A MODEST OPTIMISM

3. According to 1994 figures, an increasing number of the countries in transition in Europe have started to show signs of recovery. The gross domestic product (GDP) has been rising in most of the countries. The best results have been achieved by the group of Visegrad countries (Czech Republic, Hungary, Poland and Slovakia), as well as by Albania, Estonia, Romania and Slovenia. Industrial production, which had fallen markedly over the last five years, recorded the first positive growth rates. In aggregate, the rise in East European GDP was around 2 per cent, but there was considerable variation among individual countries ranging from 4.5 to 5 per cent in Poland, Slovakia and Slovenia, 2 to 2.5 per cent in the Czech Republic, Hungary and Romania, and close to zero in Bulgaria and Croatia.

4. Whereas the upward development trends were largely strengthened in the countries of Central and South-eastern Europe, the gap between them and the countries of the former Soviet Union (excluding the Baltic States) continued to widen. In the Russian Federation, GDP further declined as compared to 1993 although the pace of decline slowed down. Also in other countries (Belarus, Ukraine) a considerable fall was recorded in economic activities.

5. The outlook for 1995 is more optimistic. Following the cyclical upturn of the Western economies, the positive economic trends in Eastern Europe are likely to be strengthened. In the former Soviet Union countries the stabilization programme should bring the first positive results in terms of a substantive reduction of inflation, a slowing down of the pace of economic decline, stabilization of industrial production, and even some modest recovery in some crucial industrial sectors. The preliminary estimates for the first half of 1995 confirm in general the above forecast. In a number of countries of Central and South-eastern Europe the gross national product (GNP) growth rate, industrial output and exports have largely exceeded the levels of 1994.

II. UNIDO SERVICES

Challenging market for UNIDO services

6. The painful process of transition towards market economy in the countries concerned revealed huge needs for international cooperation in modernizing their industries, in upgrading their managerial and technological capabilities, in making manufacturing enterprises profitable and competitive and in using technologies that are more environment friendly and less energy intensive. Virtually all aspects of their industrial development—from industrial policy formulation to measures for increasing enterprise competitiveness—need support through international cooperation. Accordingly UNIDO expanded the range of technical cooperation services to match the specific requirements and requests of the concerned actors: Governments, industrial complexes and enterprises, and industrial research centres and other institutions.

7. UNIDO services in support of industrial recovery and restructuring in the region constitute an important complementary ingredient of overall international efforts to assist the countries in smoothing the transition process expediting the build-up of resilient structures and growth in national economies and facilitating investment and trade flows.

Matching services with needs

8. Through mechanisms such as joint committees, UNIDO intensified the policy dialogue with key decision makers in the countries of the region. Matching expressed demand with the expertise available in the Organization points to five core priority areas for the provision of services to the region: industrial restructuring, enterprise development, environment and energy, investment promotion and industrial policies and

strategies. In addressing these, small and medium enterprise (SME) development, institution-building and human resource development have been fully integrated. These priority areas are complemented by subsector-specific support to basic socio-economic development, including for the integration of women.

9. Special emphasis was placed on the development of programmes and projects that (a) are replicable within the region with a view to meeting the high demand for UNIDO services in a cost-effective manner and (b) help create new regional industrial linkages.

10. Various UNIDO services rendered to other regions were adapted for application in the economies in transition. This was the case for services related to quality management and standardization, industrial investment project preparation and appraisal, and industrial safety. In these and other areas, economic and technical cooperation was fostered among the countries of the region.

Financial strategies and support

11. The growing number of requests for UNIDO technical cooperation called for intensified efforts to mobilize new, non-traditional sources of funding for UNIDO services in the region. In the past few years financial support from various sources could be successfully secured for UNIDO projects in support of industrial development and restructuring. Although these funds are not sufficient to satisfy demand, they were of paramount importance for a successful delivery of UNIDO services in a range of crucial fields. Funding was provided by: the UK Know-How Fund, in particular for projects related to enterprise restructuring in Hungary and Poland; the Government of Austria for the promotion of cleaner production centres and environmental management in pulp and paper and tanning industries in the Czech Republic and Slovakia and other countries of the Danube River Basin; Nordic countries for assistance to the Kaliningrad region of the Russian Federation in preparing development strategies; the Government of the Netherlands for the preparation of regional development strategies in Hungary; the Government of Saudi Arabia for analysing the industrial potential and preparing support strategies for Azerbaijan, Kazakhstan, Kyrgyzstan and Uzbekistan; the Government of Italy for timber frame buildings in Croatia; the Government of France for industrial investments in agro-based industries in Central Europe; the Government of Switzerland for upgrading the footwear industry in Hungary; the Government of Japan for projects associated mainly with promoting environmentally friendly technologies and investment opportunities in Hungary, Poland, Romania, Slovakia and Central Asian countries; the European Union (PHARE) for subcontracting and partnership exchanges in Slovakia; the World Bank for a training programme for Russian managers.

12. An important share of UNIDO-executed projects in the region is financed by the United Nations Development Programme both from the national indicative planning figure (IPF) and from the Special Industrial Services programme. One example is a project executed in Romania under IPF financing for the promotion of small private enterprises: UNIDO helped the Government to establish a business development centre which, after three years, expanded as a network of centres focusing on the needs of the local private sector throughout the country. This project concept is now promoted in other selected NIS countries. Other IPF-financed large-scale projects include one on restructuring and privatization being implemented in Uzbekistan and a new project on the promotion of SMEs for Slovenia.

13. Increasingly UNIDO services are provided through self-financed trust funds. The financing of investment promotion forums organized recently for various regions of the Russian Federation are examples of this new development. Further proposals submitted by the Government of the Russian Federation under this type of financing are under consideration in the field of environmental protection from oil and oil product pollution, the promotion of technological innovation and the promotion of SMEs.

14. In enlarging the pool of financial resources for its services in the region, UNIDO will continue to strengthen its tripartite cooperation with recipient countries and with the donor community, including both multilateral financial institutions such as EU, World Bank, European Bank for Reconstruction and Development and individual donor countries.

Focused country strategies

15. This year UNIDO country support strategies were prepared for Azerbaijan, Kazakhstan, Kyrgyzstan and Uzbekistan and are in an advanced stage of preparation for Croatia and Slovakia. These strategies were produced by teams of national and international experts and UNIDO staff in close cooperation with the Governments. In addition, country programming briefs were prepared for all countries of the region.

Performance

16. In 1994, UNIDO managed both to significantly increase project approvals for the region (53 per cent in value terms over 1993) and to mobilize new, non-traditional sources of funds for technical cooperation programmes and projects. The latter included new funds oriented to the region by various donor countries as well

as new international financing schemes created specifically to assist the region. The elaboration by UNIDO of a targeted programme in support of industrial development in Europe and NIS proved to be crucial for mobilizing additional funds. In this context, the integrated and multidisciplinary technical cooperation programme for Bosnia and Herzegovina—which was partly funded in 1994—provides a good example.

17. In the first six months of 1995, UNIDO activities in the countries in transition recorded further growth by 8.5 per cent as far as new approvals are concerned, and by 20.5 per cent as to net approvals, as compared with the corresponding period of 1994. The technical cooperation projects approved in 1995 were spread widely in the region, covering 17 countries. Some projects were of a regional dimension. Technical cooperation concentrated on the priority needs of the clients in the region, i.e. on supporting economic recovery and on strengthening market principles and mechanisms in industrial development.

III. ACTION REQUIRED OF THE CONFERENCE

18. The Conference may wish to take note of the information provided in the present report.

Distr.
GENERAL

GC.6/20
22 September 1995

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Sixth session
Vienna, 4-8 December 1995
Item 9 (g) of the provisional agenda

INDUSTRIAL DEVELOPMENT AND COOPERATION ACTIVITIES: INDUSTRIALIZATION OF THE LEAST DEVELOPED COUNTRIES

Report by the Director-General

Summary

In compliance with resolution GC.5/Res.16, reports on activities carried out by UNIDO in 1994 and 1995 for the benefit of least developed countries, supplementing the information contained in document GC.6/5, chapter VIII.

CONTENTS

		Paragraphs	*Page*
Introduction		1 - 4	2
Chapter			
I.	PRIORITY AREAS	5 - 15	2
II.	FUTURE OUTLOOK	16 - 24	4
III.	ACTION REQUIRED OF THE CONFERENCE	25	5

V.95 57341 (E) (b:\1995\PMO.9)

Distr.: 3 October 1995

Introduction

1. In its resolution GC.5/Res.16, the Conference requested the Director-General, within the framework of the overall revitalization of UNIDO and its prioritization and structural reform as contained in document GC.5/23, to continue to accord highest priority to the UNIDO least developed countries (LDCs) programme, including the use of funds from the Special Industrial Services programme, the Industrial Development Fund and other sources available to UNIDO in order to assist in the implementation of the Industrial Action Programme for the Least Developed Countries. In that resolution, the Director-General was also requested to take appropriate measures to implement the conclusions and recommendations of the Second Ministerial Symposium on the Industrialization of the Least Developed Countries (Yaoundé, 3-10 December 1993) and to present a report on the implementation of resolution GC.5/Res.16 to the Conference at its sixth session through the Board. Two reports on the subject were submitted by the Director-General to the Board, at its twelfth session—when the Board adopted decision IDB.12/Dec.6—and at its thirteenth session (IDB.12/6 and GC.6/5-IDB.13/12, chap. VIII). The present report updates the latter document for 1994 and provides information on activities carried out in 1995. Other documents providing information on UNIDO activities in the LDCs include the reports on the Special Programme for the Industrial Development of Asia and the Pacific (GC.6/13/Rev.1, chap. II), on UNIDO support to the Second Industrial Development Decade for Africa (GC.6/11-IDB.14/21) and on the external debt and industrial development (GC.6/6/Add.1).

2. In 1994 and 1995, UNIDO assistance to LDCs has continued to focus on follow-up activities related to the implementation of the Paris Declaration and the Programme of Action for the LDCs for the 1990s as well as the Industrial Action Programme for LDCs (PI/114), taking into consideration the recommendations of the Second Ministerial Symposium. During this period, UNIDO activities on behalf of LDCs have included more than 100 approved or implemented projects, covering all Industrial Action Programme priority areas.

3. Activities benefiting LDCs are developed through a high degree of interdivisional collaboration within the framework of special programmes, policy documents and reports as inputs to meetings. In 1994 and 1995, the LDC Unit undertook a series of workshops, seminars and expert group meetings. Development of "seed" programmes continues to be an important initiative of the Unit.

4. Activities were promoted and developed in close cooperation with various organizations within the United Nations system and other institutions. Thus in the area of private sector development programme activities in 1994 and 1995 were defined and developed in co-operation with the World Bank. Within the framework of this cooperation, the World Bank Vice President for Finance and Private Sector Development participated in the UNIDO expert group meeting held at Kathmandu, Nepal (see para. 20 below). Special appreciation was expressed by the United Nations Conference on Trade and Development secretariat for the participation and contribution of UNIDO to the preparation of the high-level intergovernmental meeting on the mid-term review of the implementation of the Programme of Action for the LDCs for the 1990s held in Geneva in June 1995 and for the UNIDO contribution to the mid-term global review of progress towards the implementation of the Programme of Action for the 1990s, to be held in New York from 26 September to 6 October 1995. During the current biennium together with the Office for the Special Coordinator for Africa and the LDCs in the United Nations Department for Policy Coordination and Sustainable Development new directions for cooperation were formulated for informal sector development in African LDCs and Africa as a whole. Other examples of cooperation developed during the same period included: a seminar organized jointly with the Economic and Social Commission for Asia and the Pacific, on food safety for Asian and African LDCs; active participation in the Economic Commission for Africa conference on implications of the Uruguay Round Agreements in Africa, with special reference to LDCs; cooperation with the Asian Institute of Technology in organizing a training programme for Asian LDCs in quality management in the food industry; and cooperation with the International Trade Centre UNCTAD/GATT as an important feature of the grassroots project promoting the traditional textile industry of West African LDCs. This approach is only a starting point for future programme development towards the industrialization of LDCs.

I. PRIORITY AREAS

5. While priorities necessarily vary among the LDCs according to their unique endowments and needs, activities covered during 1994 and 1995 as a whole concern the following areas:

Creation of an enabling environment and mobilization of financial resources for industrial development

6. A total of 12 projects addressed specifically to this priority area benefited the following countries: Benin, Guinea, Madagascar, Mozambique, Nepal, Sierra Leone, Sao Tome and Principe, United Republic of Tanzania, Yemen and Zambia. As a whole, activities cover the process of strengthening operational capabilities of

ministries of industry, formulation of national investment policies and identification of international investment opportunities. The regional meeting of Ministers of Industry in the Asia and Pacific region to be held at New Delhi in October 1995 (see GC.6/13/Rev.1, para. 19) is one of two regional projects. The meeting will review salient challenges related to the intensifying competition in world and regional markets and will focus on five key subjects, including special problems of LDCs in the region.

Private sector development

7. Activities to support LDCs in private sector development have been carried out in 1994 and 1995 in the areas of small- and medium-scale industries, privatization and industrial rehabilitation. In promoting the development of small and medium enterprises (SMEs) in LDCs, account is taken of the great potential offered by these enterprises in building up a broader and more resilient base for industrialization and their overall contribution to long-term social and economic progress. In line with the emphasis placed by LDCs on SMEs, UNIDO has strengthened and expanded its activities in that area. UNIDO promotes the adoption and implementation of policies and strategies to ensure that requisite financial and technical resources are mobilized for SMEs, and encourages and assists efforts to modernize small enterprises and improve their quantitative and qualitative output. In the specific area of SMEs, 23 projects have been approved, are under implementation or have been implemented in 1994 and 1995, benefiting the following countries: Benin, Burkina Faso, Central African Republic, Equatorial Guinea, Ethiopia, Guinea, Kiribati, Lao People's Democratic Republic, Lesotho, Madagascar, Mozambique, Niger, Solomon Islands, Togo, Uganda, United Republic of Tanzania, Yemen, Zaire and Zambia.

8. The UNIDO privatization programme aims to assist Governments in the planning of comprehensive sustainable strategies and to further the process of divestment of public assets in industrial enterprises with a view to creating favourable conditions for the development of entrepreneurship and private initiatives. Activities have been directly linked to the development of SMEs, with 14 projects approved, implemented or under implementation in the following countries: Benin, Bhutan, Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Equatorial Guinea, Guinea-Bissau, Kiribati, Madagascar, Mali, Mauritania, Mozambique, Sierra Leone, Sudan, Togo, Uganda, Yemen and Zambia.

9. In the context of support to the process of sustainable industrial growth, industrial rehabilitation assistance has been provided at the enterprise level. Diagnostic activities have related to technical, economic, management, organizational, institutional and policy aspects, leading to comprehensive rehabilitation projects and examination of plant feasibility. Accordingly, UNIDO has approved, has implemented or is implementing 15 projects in Bhutan, Cambodia, Ethiopia, Guinea, Haiti, Lao People's Democratic Republic, Madagascar, Nepal, Sao Tome and Principe, Sierra Leone, United Republic of Tanzania and Zambia.

Industrial development in rural areas

10. A majority of the population in LDCs, particularly the poor, live in rural areas, where agriculture— as the dominant productive sector—continues to rank high among development priorities and where the development of agro-related industries will be of crucial importance. In 1994 and 1995, considerable UNIDO effort went to establishing a coherent and effective policy framework for rural industrialization and for balanced development between urban and rural economies. Typical of that approach is a project for rural small-scale industry promotion in Uganda. In Bangladesh, a UNIDO study reviewed options for policy, institutional and other forms of intervention in order to promote industrialization and employment generation in rural areas. Other programmes/projects have been implemented in Sao Tome and Principe, United Republic of Tanzania and Zambia. The emphasis placed on industrial development in rural areas of LDCs in Asia and the Pacific is described in document GC.6/13, chapter II.

Human resource development

11. UNIDO assistance to LDCs in human resource development continues to upgrade skills of nationals at all levels involved in the industrial development process. A total of 26 projects have been approved in 1994 and 1995. Efforts covered Benin, Bhutan, Botswana, Burundi, Cape Verde, Ethiopia, Madagascar, Mozambique, Myanmar, Niger, Sierra Leone, Togo, Uganda, United Republic of Tanzania and Zambia. Activities under this heading included updating and improving skills required in business organization and management so as to enhance productivity and the organizational effectiveness of industrial enterprises.

Environment and energy

12. Aware of the potential hazards to LDCs, UNIDO is following the orientation adopted by the Conference on Ecologically Sustainable Industrial Development in introducing environmental protection and resource conservation policies and programmes. Also as a priority, efforts must be made to increase the efficiency of energy use and conservation. The high priority accorded LDCs in the UNIDO environment protection and energy development programme is reflected by the approval and

implementation of 22 projects for those countries in 1994 and 1995. Projects covered a wide range of activities, including wastewater and animal waste treatment (Guinea); building institutional capabilities within the Ministry of Industry for industry-related environment policy formulation and implementation (Nepal); research and development in new and renewable sources of energy (Madagascar). Other projects benefited Cape Verde, Ethiopia, Maldives, Mozambique, Rwanda, Sudan, Uganda, United Republic of Tanzania and Yemen.

Development and transfer of technology

13. The UNIDO technology development and transfer programme for LDCs was designed to upgrade and diversify the industrial base through a build-up of technological infrastructure and of the capability for acquisition of foreign technology and technological information. In 1994 and 1995, various activities undertaken within the IDDA technology for development programme covering several LDCs focused on technology policies, strategies, management, negotiation and acquisition. A project in Ethiopia strengthened capabilities for the manufacture of spare parts and hand tools. A new technology was introduced to the milling industry of the United Republic of Tanzania. Other LDCs benefiting from projects under the development and transfer of technology programme included Guinea, Madagascar, Malawi, Maldives, Mozambique, Nepal, Niger, Sierra Leone, Sudan and Zambia.

14. Detailed information on assistance provided to a number of LDCs in the establishment of national industrial statistics programmes is contained in document GC.6/5 (para. 221). Currently, one project is under implementation in Zambia, and a project document has been prepared for the United Republic of Tanzania. Missions will be undertaken to Benin, Eritrea and other countries to promote the programme.

Transport and communication

15. The severe difficulties and handicaps faced by many LDCs, often as a result of their land-locked status and geographical isolation, create an urgent need for improving and developing both national and regional transport and communication systems for industrial development. Two projects concern the United Republic of Tanzania and Zambia, where assistance has been given for improvement, maintenance and management of transport equipment.

II. FUTURE OUTLOOK

16. Among considerations in orienting the future UNIDO programme for LDCs will be the requirement to assist those countries in overcoming possible short-term negative impacts resulting from the Uruguay Round of Agreements concluded in 1994. Support in this field will primarily include policy advice and industrial restructuring. Enhancement of product quality will be another specific issue to be addressed.

17. The programme will continue to aim at production for local consumption, based on the use of local natural resources, with special focus on agro-based industries. The final objective by 2000 is to maximize the use of local natural resources based on the training of human resources.

18. Other industrial programmes may include: assistance in the establishment of industrial estates; promotion of private sector development through micro, small- and medium-scale industries (establishment, privatization and rehabilitation); environmental protection in Sahelian and island LDCs; and micro-enterprise development.

19. Attention will also be given to the development of supporting industries and services, the lack of which is viewed as a major obstacle to LDC industrial development. Specific programmes will address sub-sectoral and institutional constraints. Preparation of technical cooperation programmes will also be carried out for groups of LDCs.

20. In preparation for the Third Ministerial Symposium to be held in Vienna from 30 November to 8 December 1995 on sustainable private sector development and accelerated growth of industrial enterprises in LDCs, a preparatory expert group meeting was held at Kathmandu, Nepal, from 4 to 8 April 1995. The meeting produced, for consideration by the Symposium and possible submission to the General Conference, a draft programme of action for sustainable private sector development in, and accelerated industrial growth of, LDCs.

21. A major hindrance to industrial growth in the LDCs is the debt burden, including bilateral concessional debt. Growth of LDCs will to a large extent depend on debt relief programmes, non-concessional capital inflows from private and public sources, and reserve requirements, all of which are subject to great uncertainties. UNIDO activities for LDCs will take account of the need for harmonization between debt relief mechanisms and ODA programmes. Additional information concerning implications of the external debt burden for LDCs is provided in document GC.6/6/Add.1, paragraphs 6 to 9.

22. A number of LDCs are covered in the series of UNIDO Industrial Development Reviews. These represent a wide dissemination of information and analysis

pertaining to renewed national capacities, redefined programmes and priorities, and emerging opportunities across manufacturing subsectors. Thus, subsector-specific information and analyses contained in the 1994 Review of Lao People's Democratic Republic support technical cooperation programming for industry and are also intended to attract potential investors to emerging industrial investment and trade opportunities. Reviews of Eritrea, Ethiopia and Uganda are under preparation as substantive inputs to the UNIDO Investors' Forum scheduled to be held at Kampala, Uganda in November 1995. Within the framework of the Industrial Development Decade for Africa (IDDA) programme, Reviews of Angola, Mozambique and the United Republic of Tanzania are to be initiated in 1996. A strategic review of the industrial sector of the Lesotho economy emphasized in particular the textile and clothing subsectors in the light of developments in South Africa.

23. UNIDO will maintain its country-level efforts in analysing prospects and constraints relating to industrial development and in mobilizing financial resources for industrial development. Since the problems of one sector cannot be solved in isolation, the linkages between actions at the sectoral, national, subregional and international levels should be taken into account. Although the manufacturing sector is still small in LDCs, it is the focus of development aspirations and the primary potential for dynamic growth.

24. A review of UNIDO's approach to the LDCs will be undertaken early in the 1996-1997 biennium, with a view to its re-orientation. Plans call for putting in place a more integrated programme approach to the LDCs while ensuring synergies with programmes of other organizations in the United Nations system.

III. ACTION REQUIRED OF THE CONFERENCE

25. The Conference may wish to take note of the information contained in the present document.

Distr.
GENERAL

GC.6/21
18 September 1995

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Sixth session
Vienna, 4-8 December 1995
Item 11 of the provisional agenda

MOBILIZATION OF FINANCIAL RESOURCES FOR UNIDO PROGRAMMES

Projects approved under trust fund arrangements

Report by the Director-General

Summary

In compliance with decision IDB.14/Dec.3, paragraph (e), provides information on geographical and sectoral distribution of projects financed under trust funds in 1994.

1. At its fourteenth session, while taking note of the information provided in document IDB.14/10/Add.2 and Corr.1, the Industrial Development Board requested the Director-General to submit to the General Conference at its sixth session "more detailed information, including graphics, on a geographical and sectoral basis concerning both third party- as well as self-financed trust funds" (decision IDB.14/Dec.3, para. (e)). The present document thus provides in tabular and graphic form information on the geographical and sectoral distribution of projects financed under trust funds in 1994, as listed in document IDB.14/10/Add.2 and Corr.1.

2. There are two categories of trust fund projects: (a) third party trust fund projects (TF) where the third party providing the funds may be a government or non-government agency, a bank or development finance institution, an individual or a group of companies, industrial associations or funds; and (b) self-financed trust fund projects (SF) where the funds are contributed by a government or non-governmental organization or enterprise that is the beneficiary of the assistance provided by UNIDO.

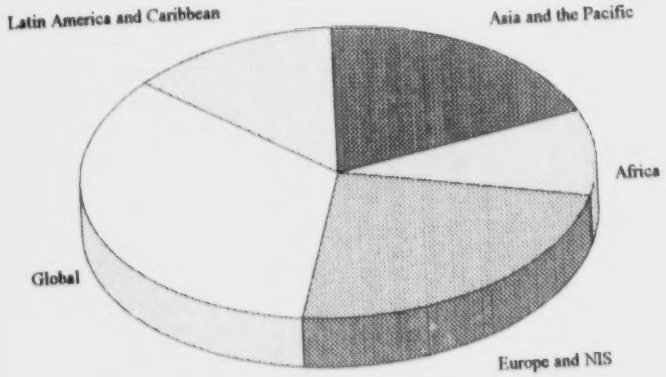
3. A classification by medium-term plan priority for these projects was only introduced in the course of 1994. For the purpose of the present report, however, all 1994 approved projects were classified and are included in the following tables and figures.

V.95 57219 (E) (b:\95\pmo.9)

Distr.: 26 September 1995

NET TF APPROVALS (EXCLUDING OVERHEADS) IN 1994

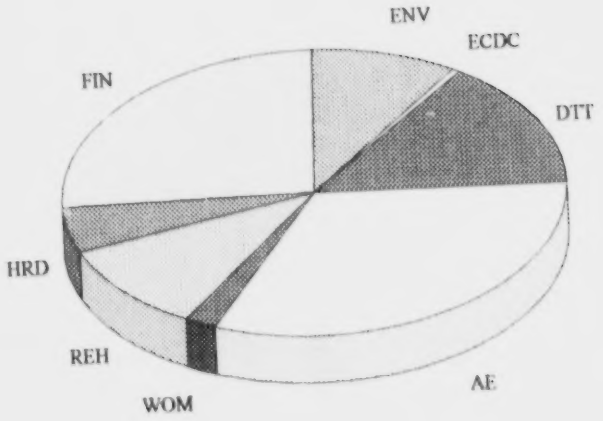
Figure 1: By region



Region	US$	Percentage
Africa	569,445	9.6
Asia and the Pacific	1,147,019	19.3
Europe and NIS	1,405,043	23.7
Latin America and Caribbean	773,197	13.0
Global	2,036,240	34.3
TOTAL *	**5,930,944**	**100.0**

*Includes Associate Expert programme/JPO travel funds ($ 1,889,358)

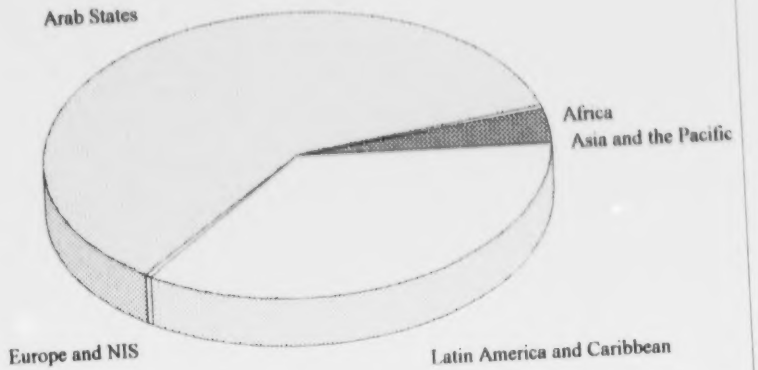
Figure 2: By medium-term plan priority



	Medium-term plan priority	US$	Percentage
DTT	Development and transfer of technology	878,970	14.8
ECDC	Economic cooperation among developing countries	30,000	0.5
ENV	Environment	559,123	9.4
FIN	Mobilization of financial resources for industrial dev.	1,531,409	25.8
HRD	Human resource development	304,400	5.1
REH	Industrial rehabilitation and modernization	618,261	10.4
WOM	Integration of women in industrial development	119,423	2.0
AE	Associate Expert programme/JPO travel funds	1,889,358	31.9
	TOTAL	**5,930,944**	**100.0**

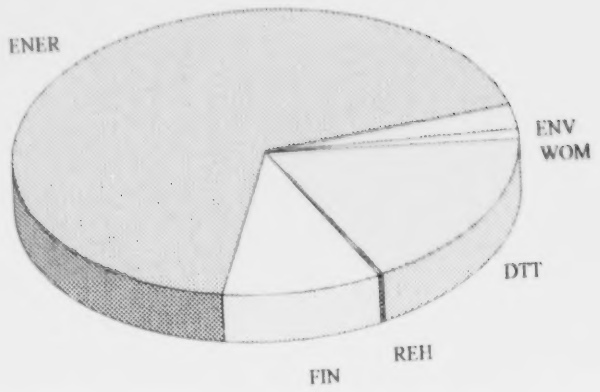
NET SF APPROVALS (EXCLUDING OVERHEADS) IN 1994

Figure 3: By region



Region	US$	Percentage
Africa	57,917	0.5
Arab States	7,379,554	60.1
Asia and the Pacific	464,181	3.8
Europe and NIS	52,643	0.4
Latin America and Caribbean	4,315,676	35.2
TOTAL	**12,269,971**	**100.0**

Figure 4: By medium-term plan priority



	Medium-term plan priority	US$	Percentage
DTT	Development and transfer of technology	2,178,175	17.8
ENER	Energy	8,333,843	67.9
ENV	Environment	355,878	2.9
FIN	Mobilization of financial resources for industrial dev.	1,238,562	10.1
REH	Industrial rehabilitation and modernization	33,518	0.3
WOM	Integration of women in industrial development	129,995	1.1
	TOTAL	**12,269,971**	100.0

Distr.
GENERAL

GC.6/22
19 October 1995

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Sixth session
Vienna, 4-8 December 1995
Item 12 (h) of the provisional agenda

FINANCIAL AND ADMINISTRATIVE MATTERS: COMPUTERIZATION PROGRAMME

Electronic data-processing programme of UNIDO

Report by the Director-General

Summary

Provides, in compliance with General Conference decision GC.4/Dec.18, paragraph (h), an update on the implementation of the electronic data-processing programme.

The present document provides an update, as of 30 September 1995, to the information contained in documents PBC.11/4 and IDB.14/26 as presented in the following annexes.

Page

Annexes

I. Status of action taken on outstanding recommendations of Touche Ross Management Consultants and of Andersen Consulting 2

II. Status of action taken on outstanding recommendations of the External Auditor 4

III. Cost of implementation, 1 January 1994 - 30 September 1995 5

IV. Contractual commitments, 1 January 1994 - 30 September 1995 6

V.95 57088 (E) (b:\1995\pmo16)

Distr.: 25 October 1995

Annex I

STATUS OF ACTION TAKEN ON OUTSTANDING RECOMMENDATIONS OF TOUCHE ROSS MANAGEMENT CONSULTANTS[1] AND OF ANDERSEN CONSULTING[2]

OUTSTANDING RECOMMENDATIONS	CURRENT STATUS
1. There is a need for a systematic review of procedures within UNIDO. This review must come about from a management initiative and cannot be led by EDP. There is too much duplication of effort and too much reliance on paper-based methods. (8.1.2)	1. The Secretariat has continued its efforts to streamline procedures and will rely on the results of the ongoing UNIDO reform to eliminate duplication of effort and reduce paper flow.
2. The information technology steering group should identify and sanction any proposed changes to packages. (8.1.3)	2. No software packages were changed or new ones introduced in 1995. In 1996 a reduction in the number of mainframe software packages is envisaged. This is part of the UNIDO reform, as a measure of reducing the cost of the Facilities Management agreement with IAEA.
3. Extensive training of EDP will be required in the use of the new methods and tools. (8.1.3)	3. Additional MIS staff training is planned for the last quarter of 1995. In addition, in order to update existing staff skills in the application of new technologies, priority will be given, within available resources, to this type of training for MIS staff in the 1996-1997 biennium.
4. Further investment in current systems should be avoided. Maintenance of existing systems must be restricted to changes which are absolutely essential, even if this will undoubtedly lead to dissatisfaction in the user community. The commitment of management is vital to maintain the support and understanding of the user community during this difficult period. (8.1.3)	4. As reported in PBC.11/4, the 1995 work plan of MIS adheres to this recommendation of the external consultants, and has reduced the allocation of resources devoted to the maintenance of existing systems to the minimum required to keep such systems running. Future yearly work plans of MIS will continue to adhere to this recommendation.
5. Better communications with the field need to be put in place. In the long-term, if and when it can be cost-justified, computer-based communications can be considered. (8.1.1)	5. Communications with the field are now possible in many countries, as a result of the use of net and the electronic mail project for UNIDO Headquarters which has been finalized in mid-1995. For Africa, where commercial net providers are not available in several countries, efforts are actually under way to evaluate and recommend guidelines for a technically sound and cost-effective approach to ensure electronic mail connectivity over the net, giving initial priority to UCD offices.
6. The cabling programme should be resumed with the wiring of six floors in 1992-1993 and the remainder in 1994-1995. Priority should be given to those floors with greatest needs. (8.3.2)	6. The wiring of all UNIDO offices has been completed.

[1] References in the column "Primary recommendations" refer to sections of the final report of Touche Ross (GC.4/CRP.1).

[2] Strategic Automation Plan - Phase 2 Final Report, Vienna, 16 June 1992.

7. The acquisition of 90 PC's per biennium should go a long way towards satisfying UNIDO's needs. (8.3.2)	7. As reported in PBC.11/4, the number of PC's acquired in the 1994-1995 biennium is based on this recommendation. Since the costs of hardware continue to decrease, acquisition will be supplemented with internal components to upgrade obsolete equipment or additional sets to replace very old and malfunctioning workstations.

Annex II

STATUS OF ACTION TAKEN ON OUTSTANDING RECOMMENDATIONS OF THE EXTERNAL AUDITOR[3]

PRIMARY RECOMMENDATIONS	CURRENT STATUS
1. A major objective should be intensive training of the existing EDP staff in the use of modern data-processing techniques and tools, and of the end-users regarding the relevant applications and software packages. (IDB.10/4, para. 178)	1. Status reported under recommendation number 3, annex I.
2. Standards should be established and complied with, throughout the Organization as a whole, regarding the use of software packages (i.e. word processing, database products, spreadsheets) thus enabling the transfer of any document without conversion and/or duplication of efforts. (IDB.10/4, para. 179)	2. Status as reported in PBC.11/4.

[3] Those recommendations that have been fully implemented are not included.

Annex III

COST OF IMPLEMENTATION, 1 JANUARY 1994 - 30 SEPTEMBER 1995

(In US dollars at US$ 1 = AS 12.90)

	1994 Allotments	Disbursements 01/01/94-30/09/95	Obligations	Expenditure (2 + 3)	Balance (1 - 4)
	(1)	(2)	(3)	(4)	(5)
Staff costs	4,344,800	3,483,900	539	3,484,439	860,361
Income	(293,500)	(243,985)	-	(243,985)	(49,515)
Mainframe					
Hardware	2,385,400	2,368,435	14,316	2,382,751	2,649
Software	170,000	166,037	-	166,037	3,963
Operation and maintenance	2,928,600	2,325,407	603,177	2,928,584	16
Office automation					
Hardware	800,000	760,578	34,514	795,092	4,908
Software	157,000	79,475	30,117	109,592	47,408
Maintenance	282,600	234,668	42,861	277,529	5,071
Other					
Supplies and materials	326,300	253,990	56,025	310,015	16,285
Network	319,400	177,109	133,642	310,751	8,649
External computer costs	56,000	10,875	44,782	55,657	343
Training	267,900	183,443	66,587	250,030	17,870
Travel/meetings	6,300	3,810	-	3,810	2,490
Consultancy support	120,200	86,781	31,585	118,366	1,834
Miscellaneous costs	6,400	2,001	-	2,001	4,399
Income	(400,200)	(173,601)	-	(173,601)	(226,599)
TOTAL	11,477,200	9,718,923	1,058,145	10,777,068	700,132

Notes:

1. Allotments represent the 1994 and 1995 regular budget and operational budget appropriations, excluding reserves of $1,618,600.

2. Obligations include contractual commitments for 1994 and 1995.

Annex IV

CONTRACTUAL COMMITMENTS. 1 JANUARY 1994 - 30 SEPTEMBER 1995

(In US dollars at US$1 = AS 12.90)

Contract number	Supplier	Decription	Period	1994	1995	1996	1997	Total
94/267	Gammag	Maintenance of Wang VS system	01/01/94-31/03/94	15,504	-	-	-	15,504
94/268	Rank Xerox	EPIC & HFDL software maintenance	01/01/94-31/03/94	736	-	-	-	736
94/269 & 95/249	General Electric	Geisco Service	01/01/94-31/12/95	11,628	-	-	-	11,628
94/270 & 95/253	PTT	Rental line 2308197	01/01/94-31/12/95	194	213	-	-	407
94/271 & 95/256	PTT	Rental datex-P line	01/01/94-31/12/95	19,690	21,659	-	-	41,349
94/272 & 95/252	Radio Austria	Rental & usage - line 2329 11000607	01/01/94-31/12/95	2,326	2,558	-	-	4,884
94/273 & 95/250	Radio Austria	Rental of line 2329 11001734	01/01/94-31/12/95	1,163	1,279	-	-	2,442
94/274 & 95/251	Radio Austria	Rental of line 2329 11001850	01/01/94-31/12/95	155	171	-	-	326
94/275	PTT	Olivetti PCs Rental of line 238348	02/01/94-31/12/94	388	-	-	-	388
94/276 & 95/254	PTT	Rental of line 2307584	01/01/94-31/12/95	12,403	13,643	-	-	26,046
94/277 & 95/255	PTT	Telerate line 243680	01/01/94-31/12/95	1,163	1,279	-	-	2,442
94/278 & 95/259	Rank Xerox	Maintenance printer X4090	01/01/94-31/12/95	31,395	33,279	-	-	64,674
94/279 & 95/257	Rank Xerox	Maintenance printer X4050	01/01/94-31/12/95	19,792	20,979	-	-	40,771
94/280	IAEA	Maintenance of LTCs	01/01/94-31/03/94	1,938	-	-	-	1,938
Balance carried forward				118,475	95,060	-	-	213,535

Balance brought forward				118,475	95,060	-	-	213,535
94/281 & 95/264	University of Vienna	EARN participation	01/01/94-31/12/95	7,442	10,419	-	-	17,861
94/282, 95/260 & 95/261	Rank Xerox	Printing costs - printer X4090	01/01/94-31/12/95	33,371	33,371	-	-	66,742
94/283 & 95/262	Share Europe	Membership fee 1994	01/01/94-31/12/95	1,426	568	-	-	1,994
94/284	SAS	SAS Base system and utilities	01/01/94-30/04/94	15,992	-	-	-	15,992
94/285 & 95/248	ICC	Computer usage	01/01/94-31/12/95	25,000	25,000	-	-	50,000
94/286	IBM	Software maintenance for token ring	01/01/94-31/03/95	3,833	-	-	-	3,833
94/287 & 95/246	IAEA	Computer usage	01/01/94-31/12/95	4,651	16,279	-	-	20,930
94/288	EDV Software	ADABAS maintenance	01/01/94-31/03/94	15,683	-	-	-	15,683
94/289	Computer Associates	CA-1 copycat software maintenance	01/01/94-31/03/94	814	-	-	-	814
94/290	APT	OLIVER software maintenance	01/01/94-31/03/94	1,720	-	-	-	1,720
94/291	EVN	SECURITREE software maintenance	01/01/94-31/03/94	1,395	-	-	-	1,395
94/292	Computer Associates	CA-LIBRARIAN software maintenance	01/01/94-31/03/94	6,100	-	-	-	6,100
94/293	Candle	OMEGAMON software maintenance	01/01/94-31/03/94	4,942	-	-	-	4,942
94/294	Management Data Wang	Leasing PCs plus buyout	01/01/94-28/02/94	17,688	-	-	-	17,688
94/298 & 95/258	Rank Xerox	Printing costs - printer X4050	01/01/94-31/12/95	25,619	25,619	-	-	51,238
		Facilities management	01/01/94-31/03/94	312,682	-	-	-	312,682
94/299	IBM							31,008
94/300 & 95/244	Rank Xerox	Maintenance and repair of peripherals	01/01/94-31/12/95	15,504	15,504	-	-	20,151
94/301 & 95/263	Telerate	Financial market information	01/01/94-31/12/95	10,078	10,073	-	-	854,308
Balance carried forward				622,415	231,893	-	-	

Balance brought forward				622,415	231,893	-	-	854,308
94/302	IBM	Software licence	01/01/94-31/03/94	122,333	-	-	-	122,333
94/303	Gammag	Maintenance and repair of peripherals information	01/01/94-31/12/94	10,900	-	-	-	10,900
94/307	IBM	Mainframe lease	01/01/94-30/06/94	2,215,200	-	-	-	2,215,200
94/310	Compuware	ABEND-AID software maintenance	01/01/94-31/03/94	1,281	-	-	-	1,281
94/311	Polst	Cabling floor D-22	1994	45,363	-	-	-	45,363
94/313	Radio Austria	Dial-up position for Treasury	01/01/94-31/12/94	1,363	-	-	-	1,363
94/315	IAEA	Facilities management	01/04/94-31/12/97	1,025,293	1,597,922	1,524,455	1,609,824	5,757,494
94/320	IBM	Maintenance of mainframe	April 1994	19,101	-	-	-	19,101
94/329	Prager Consult	Computer-related training	1994 and 1995	119,000	119,000	-	-	238,000
94/339	IBM	Maintenance for token ring software	April 1994	1,278	-	-	-	1,278
94/340	IBM	Software licence	April 1994	40,778	-	-	-	40,778
94/307	IBM	Purchase of mainframe peripherals after end of lease period	June 1994	28,797	-	-	-	28,797
94/349	Data Transport Systems	Modification of UNIDO's PC-based budget system	01/09/94-30/09/94	5,500	-	-	-	5,500
94/356	I-Net Gmbh	Consultancy to set up SQL server	August 1994	8,000	-	-	-	8,000
94/359	Retailers Handels Gmbh	Maintenance and repair of bar code reader	1994	928	-	-	-	928
94/364	Gammag	Technician to re-install						
94/379	I-Net Gmbh	Extra for DOS in 600 PCs	September 1994	5,814	-	-	-	5,814
		Installation and setting up Sybase DBMs and Novell Netware software	December 1994	9,302	-	-	-	9,302
94/381	Institute for Computer & Information Engineering	Analysis of UNIDO's existing computerized systems	1995	-	17,000	-	-	17,000
Balance carried forward				4,282,646	1,965,815	1,524,455	1,609,824	9,382,740

Balance brought forward				4,282,646	1,965,815	1,524,455	1,609,824	9,382,740
94/383	Data Transport Systems	Modification of UNIDO's PC-based budget system	01/12/94-31/01/95	2,750	-	-	-	2,750
94/384	Procon Data	Development of PC-LAN based travel system	1995	-	19,000	-	-	19,000
95/311	Gammag	Installation of 150 PCs and 150 printers	1995	-	13,372	-	-	13,372
95/312	Procon Data	Development of software on the mainframe for data input for UNIDO's travel authorization system	1995	-	25,213	-	-	25,213
95/208	Sorbus	Maintenance and repair of peripherals	01/01/95-31/12/95	-	102,408	-	-	102,408
95/216	Compuserve	1995 subscription for computerized information service	1995	-	7,320	-	-	7,320
95/142	Martin Graeff	Installation and configuration of a Sunsparc 20 UNIX-based cc: mail/ Internet server	1995	-	10,000	-	-	10,000
95/307	Bacher Systems	Cost of servicing BINAS server	1994	-	1,083	-	-	1,083
95/313	Gammag	Installation of 200 Pathway Access and cc:mail Software for cc:mail/ Internet project	1995	-	7,752	-	-	7,752
95/339	Gammag	Costs to cover five days stand-by Wang support during PBC session	April 1995	-	1,163	-	-	1,163
95/340	S+S Electronic	Cover costs for repair of Olivetti PC M4-40	1995	-	134	-	-	134
95/341	Management Data	Costs to cover ad hoc repairs of two Wang machines	1995	-	1,065	-	-	1,065
Balance carried forward				4,285,396	2,154,325	1,524,455	1,609,824	9,574,000

Baiance brought forward				4,285,396	2,154,325	1,524,455	1,609,824	9,574,000
95/348	Kapsch AG	Installing cables in all Buildings Management offices and workshops, and UNIDO training rooms	1995	-	94,689	-	-	94,689
95/360	Ackerl + Geiger	Rental of overhead projector and LCD colour projection panel during PBC session	April 1995	-	959	-	-	959
95/368	Science Research Association	Leasing of SQL server Programme Series	1995 & 1996	-	4,167	4,168	-	8,335
95/369	Procon Data	Extension of contract 94/384 (TRICOS) to adjust the data-base structure as well as relevant internal programmes to accommodate new network requirements of UNIDO	1995	-	7,050	-	-	7,050
95/382	Procon Data	Cost of 30 hours for UNIDO TRICOS clients installation/ re-installation for MIS/CEUS		-	2,558	-	-	2,558
95/389	Procon Data	Development of the Travel Information and Coordination System (TRICOS) in order to create a dedicated facility to report to executive management	1995	9,130	9,130	-	-	9,130
				4,285,396	2,272,878	1,528,623	1,609,824	9,696,721

Abbreviations

CPU - Central processing unit
DBM - Data Base Manager
LAN - Local area network
LTC - Local terminal controller
PC - Personal computer
SQL - Standard Query Language

Distr.
GENERAL

GC.6/23
26 September 1995

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Sixth session
Vienna, 4-8 December 1995
Item 9 (i) of the provisional agenda

INDUSTRIAL DEVELOPMENT AND COOPERATION ACTIVITIES: GLOBAL PRIORITIES

UNIDO contribution to global United Nations conferences

Report by the Director-General

Summary

Describes the UNIDO contribution, follow-up and preparatory activities to recent and forthcoming global United Nations conferences.

CONTENTS

		Paragraphs	*Page*
Introduction		1 - 3	2
Chapter			
I.	UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (UNCED)	4 - 12	2
II.	INTERNATIONAL CONFERENCE ON POPULATION AND DEVELOPMENT (ICPD)	13	3
III.	WORLD SUMMIT FOR SOCIAL DEVELOPMENT	14 - 17	3
IV.	FOURTH WORLD CONFERENCE ON WOMEN	18 - 23	4
V.	UNITED NATIONS CONFERENCE ON HUMAN SETTLEMENTS (HABITAT II)	24	5
VI.	SYSTEM-WIDE FOLLOW-UP MECHANISMS	25 - 27	5
VII.	ACTION REQUIRED OF THE CONFERENCE	28	6

V.95 57528 (E) (b:\1995\pmo 9)

Distr.: 6 October 1995

Introduction

1. During the 1990s, a number of global conferences are being organized and held under the auspices of the United Nations to examine, in a holistic and interrelated manner, major developmental concerns, their nature, dimensions and implications. The objective of such conferences is to formulate appropriate policies, strategies and programmes to address the key issues and to define ways and means of mobilizing international support for concrete remedial action. In that context, the United Nations Conference on Environment and Development (UNCED) held at Rio de Janeiro, Brazil, in June 1992, the International Conference on Population and Development held at Cairo, Egypt, in September 1994, the World Summit for Social Development, organized in March of this year in Copenhagen, Denmark, and the Fourth World Conference on Women, which met in September 1995 at Beijing, China, constituted relevant milestones in the endeavours of the multilateral system to come to grips with those concerns.

2. UNIDO took an active part in those conferences, contributing its knowledge and experience towards the definition of appropriate solutions as seen from an industrial perspective. Furthermore, UNIDO has been actively preparing for its participation in and contribution to the United Nations Conference on Human Settlements (Habitat II), which is slated for June 1996 at Istanbul, Turkey.

3. The follow-up given by UNIDO to the conferences already held and the preparations being made for the one still to come are summarily described below, in chronological order, with cross-reference made, whenever relevant, to information already provided in other documents.

I. UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (UNCED)

4. Environmentally sustainable industrial development (ESID) is one of the five development objectives to guide the activities of the Organization in the years to come as outlined in document GC.5/23 and approved at the fifth session of the General Conference in resolution GC.5/Res.18. Stemming from UNIDO participation in UNCED—and from the UNIDO-organized ESID Conference that preceded it at Copenhagen, Denmark, in October 1991—a comprehensive programme of work was elaborated and environment-related activities were expanded to reflect the fundamental role that industry is called upon to play in that respect. Within the framework of efforts made to further refine and focus the assistance that UNIDO renders to its constituency, taking into account the resource outlook, "Environment and energy" has been selected to be one of the seven programmatic themes for the next biennium, as elaborated upon in document IDB.14/13. The theme comprises four component programmes, namely:

(a) Environmentally sustainable industrial development strategies;

(b) Clean and safe production;

(c) Implementation of international conventions;

(d) Industry and international environmental norms and standards.

5. As reported in detail in document GC.6/28, UNIDO has increased its participation in the implementation of Agenda 21 and other internationally agreed instruments for environmental protection. In Industrial Development Board decision IDB.11/Dec.18, UNIDO was requested to support the implementation of Agenda 21, particularly in the following priority areas: integrating environment and development in decision-making; protection of the atmosphere; environmentally sound management of biotechnology; strengthening the role of business and industry; transfer of environmentally sound technology and chemical safety. The Director-General was also requested to engage the Organization in global efforts to protect the ozone layer in accordance with the Montreal Protocol.

6. UNIDO is actively involved in the environmental initiatives of the United Nations system and plays a leading role in their industry-specific programmes. Along with the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) and the World Bank, the Organization is one of the four implementing agencies of the Multilateral Fund for the Implementation of the Montreal Protocol.

7. With a view to ensuring coordinated follow-up and implementation of the comprehensive set of recommendations provided under Agenda 21, two important mechanisms were created within the United Nations: the Commission on Sustainable Development (CSD), as a functional commission under the Economic and Social Council, and the Inter-Agency Committee on Sustainable Development (IACSD), under the Administrative Committee on Coordination (ACC). In turn, IACSD designated Task Managers to coordinate inter-agency work on various chapters, issues and programme areas of Agenda 21.

8. UNIDO has been designated as the Task Manager for Chapter 16, Environmentally sound management of biotechnology; this is a cross-sectoral issue to be seen in

conjunction with Chapter 34 (Transfer of environmentally sound technology, cooperation and capacity-building) and Chapter 35 (Science for sustainable development). In March 1995, UNIDO prepared its Task Manager's Report which provides a summary account of system-wide action taken since UNCED as well as an outlook on further action required to meet the agreed objectives. It served as the basis for the report of the Secretary-General on this subject, to the third session of CSD.

9. In connection with the implementation of Chapter 34 of Agenda 21, and in response to a CSD decision, UNIDO convened, jointly with the Department for Policy Coordination and Sustainable Development (DPCSD) and UNEP, a round-table meeting on technology transfer, cooperation and capacity building for sustainable development (in Vienna, February 1995). The proceedings of that round table, while identifying areas for operational initiatives, also provided a major input for the report of the Secretary-General on Chapter 34 to the third session of CSD.

10. UNIDO has also become a full-fledged member of the Interorganization Programme for the Sound Management of Chemicals (IOMC), together with the Food and Agriculture Organization of the United Nations (FAO), the International Labour Organization, UNEP, the World Health Organization and the Organisation for Economic Cooperation and Development; the Programme provides technical support to the Intergovernmental Forum on Chemical Safety.

11. Of the many UNCED follow-up initiatives taken by UNIDO, the programme on national cleaner production centres, which UNIDO launched in cooperation with UNEP, deserves specific mention. The centres will play a catalytic role in promoting industrial pollution prevention by providing technical information and advice, demonstrating cleaner production techniques and technologies, and training industry and government professionals. While the initial phase of this programme will support eight centres for three years, the intention is to eventually be able to provide support to 20 centres over a period of five years. The programme draws not only on the experience of similar activities in developed countries, but also on the experience of UNIDO in promoting and implementing industrial pollution prevention programmes in developing countries.

12. The initiatives taken by the non-governmental organizations (NGO) community with regard to Agenda 21 is a crucial aspect of its implementation. UNIDO sees the involvement of civil society as being central to realizing the industrial dimension of sustainable development strategy. Accordingly, UNIDO endeavours to foster close interaction with non-governmental actors in industrial development, such as industry associations and trade unions. In that context, an NGO Forum on Cleaner Industrial Production will be held on 30 November - 1 December 1995, immediately before the sixth session of the General Conference, to attain a common understanding with the NGO community on the efforts to promote cleaner industrial production, and to enlist their support in developing the UNIDO Cleaner Production Programme.

II. INTERNATIONAL CONFERENCE ON POPULATION AND DEVELOPMENT (ICPD)

13. As far as UNIDO is concerned, the contribution of the industrial sector to issues related to population and development touches upon a number of areas also closely linked to the themes of two other major conferences recently held, i.e. the World Summit for Social Development and the Fourth World Conference on Women. Thus, activities reported upon under chapters III and IV below should be equally considered as part of the follow-up to ICPD.

III. WORLD SUMMIT FOR SOCIAL DEVELOPMENT

14. In addressing the question of social development from the standpoint of industry's contribution hereto, UNIDO has emphasized the aspects of poverty alleviation and improved living standards through the build-up of productive industrial capacities, job creation, more equitable distribution of income and social services to rural areas. The key role of industry as the main engine of growth and as a basis for the overall socio-economic development of a country is beyond question. A sustainable increase in the standard of living of a population, in productive employment, in education, in health and in the supply of basic needs is achievable only through a dynamic industrial development process. Indeed, one of the five development objectives of the Organization is "equitable development through industrial development". Efforts have been enhanced to develop integrated packages of services addressing issues of socially sustainable industrial development in the framework of the Summit's core themes. Specifically, UNIDO programmes cover:

(a) Infrastructural development to promote socially-oriented industrial growth;

(b) Transfer and adaptation of industrial technologies having a significant social impact;

(c) Development and application of appropriate technologies for local production to satisfy basic needs (food, clothing, health, housing and energy);

(d) Promotion and upgrading of micro-industries as a means to broaden entrepreneurship and increase participation;

(e) Development of industry-related services as a means to generate urban employment;

(f) Development of small- and medium-scale industries geared to the creation of employment including people of disadvantaged groups;

(g) Promotion of agro-related, regional and rural industrial development;

(h) Upgrading of human skills and management systems to meet the challenges of globalization;

(i) Further strengthening activities for integrating women in industrial development;

(j) Industrial recovery in the context of post-emergency assistance.

15. Many of these programmes offer good potential for inter-agency cooperation (e.g. with FAO in the field of food security and food processing). However, scarce additional funding for the overall social development initiatives is likely to impose severe limitations on such programmes.

16. As it was emphasized at ICPD and the World Summit for Social Development, NGOs need to be given a key role in the initiation and implementation of technical cooperation programmes on social-oriented industrial development. UNIDO is in the process of establishing an advisory council drawn from industry-sector NGOs which, partly related to the World Summit follow-up, will constitute a forum for exploring innovative concepts of UNIDO interaction with the private sector.

17. A specific report on recommendations for follow-up action by UNIDO to the World Summit for Social Development (IDB.14/24) was presented to the Industrial Development Board at its fourteenth session. The Board took note of the report.

IV. FOURTH WORLD CONFERENCE ON WOMEN

18. UNIDO participated in the Conference and took a series of initiatives in support of the Conference objectives. UNIDO chose "Global industrial change: Women and socio-economic progress" as its theme for the Conference with the aim of increasing awareness of how women's industrial participation is affected by economic changes caused by globalization of production and trade. Emphasis was placed on the potential economic and social disadvantages facing developing countries that fail to recognize the significant contribution women make to industry, especially in manufacturing where women account for 30 per cent of the total manufacturing labour force.

19. To prepare for and define its approach to the Conference, UNIDO organized an expert group meeting on women in industry that was held in Vienna from 10 to 12 July 1995, financed by the Government of the Netherlands. It was attended by 21 experts on women's issues from around the world. The meeting affirmed that, through UNIDO efforts to increase economic opportunities, women in developing countries will have better access to income and employment possibilities as well as decision-making roles in management and leadership positions. One of the key elements of the UNIDO strategy is to promote the establishment of policies aimed at reaching a target of women representing 30 per cent of managerial posts, in both public and private sectors, by the year 2010.

20. The three sub-themes for the UNIDO message to the Fourth World Conference on Women were determined by taking into account UNIDO expertise in industrial development and knowledge of the individual needs of developing countries. The sub-themes were discussed at the meeting and the views of experts as expressed thereon are as follows:

(a) Policies and strategies for better integration of women in industrial development: Current industrial policies in many countries tend to disadvantage women and thereby undermine their ability to overcome poverty. Some policies restrict the participation of women in certain industrial activities and/or limit their progress to levels of industrial management. UNIDO will encourage policy changes that could promote better participation of women at all levels, in particular at enterprise, factory and community levels. Macroeconomic policies, including structural adjustment programmes, should be evaluated more closely to determine their impact on the employment of women in industry and revised, if necessary;

(b) Human resource development: Services are needed to train female staff for development projects. In this connection, it is important to improve cooperation with the private sector;

(c) Access to resources: Access by women to resources must be improved. This entails facilitating access to land and natural resources, low-cost credit, education, markets, support systems, employment opportunities, etc. By equalizing access to resources, women will be able to utilize opportunities to move into

industrial employment and out of the constraints of poverty.

21. Other initiatives launched by UNIDO in the context of its participation in the Conference consisted of the celebration, on 6 September 1995, of the first Women in Industry Day, the creation of a UNIDO Women in Industry Recognition Award and the organization of a Women in Industry exhibition.

22. In the follow-up activities to the Conference, special attention will be paid, *inter alia*, to the development, production and distribution of cost-effective, high quality drugs and medical supplies to areas and people in greatest need in developing countries, through:

(a) Supporting the harmonization of pharmaceutical industrial policies in developing countries and promoting internationally accepted patent laws;

(b) Improving the manufacturing processes and R and D capabilities of pharmaceutical companies in developing countries;

(c) Establishing quality assurance systems by introducing company-wide quality management techniques, so that essential and generic drugs will meet current requirements;

(d) Enhancing competitiveness and productivity by reducing production costs to a feasible minimum and introducing financially viable product-mixes to allow domestic industry not only to survive, but to grow;

(e) Ensuring the supply of medication at the lowest possible cost to patients and social security systems;

(f) Adopting internationally accepted managerial practices and technology options that are designed to minimize environmental impact.

23. Moreover, UNIDO will advise on the creation of an enabling environment for the development of rural and small-scale enterprises in which women are the key actors, through, *inter alia*, facilitating access to credit, setting up associations, improving support services and infrastructure, upgrading technologies and providing training for the development of entrepreneurship.

V. UNITED NATIONS CONFERENCE ON HUMAN SETTLEMENTS (HABITAT II)

24. In order to ensure adequate preparations for the Conference within UNIDO, an internal task force was set up. The activities launched by UNIDO in that context include a high-level colloquium on industrialization and urban development, to be held in Vienna in October 1995, and a regional Consultation on the construction industry with emphasis on housing for least developed countries in Africa, which is scheduled for the second half of 1996. The regional Consultation is intended to build upon the results of Habitat II by elaborating in greater detail on specific industrial aspects of the development of the construction industry in that group of countries and to identify concrete avenues of co-operation in that regard. The considerable experience and knowledge of UNIDO as regards building materials for low-cost housing will be applied in the follow-up activities.

VI. SYSTEM-WIDE FOLLOW-UP MECHANISMS

25. To ensure coordination of and coherence in the follow-up to global conferences by individual organizations in the United Nations system, certain specific institutional mechanisms have been created—such as IACSD, mentioned earlier in the context of UNCED, in which UNIDO plays an active role. Moreover, relevant coordination bodies, subsidiary to ACC, such as the Consultative Committee on Programme and Operational Questions (CCPOQ), also act as forums for that purpose.

26. "Coordinated follow-up by the United Nations system and implementation of the results of major international conferences organized by the United Nations in the economic, social and related fields" was an important sub-item of the agenda of the substantive session (coordination segment) of the Economic and Social Council held in June-July 1995. For the purpose of the debate, the Council had available the report of the Secretary-General on the subject (E/1995/86). The Council adopted a set of conclusions (E/1995/L.58) related to the intergovernmental level, inter-agency coordination at all levels, reporting, cooperation between the United Nations, the Bretton Woods institutions and the World Trade Organization, and the mobilization of resources. In that context, the Council touched upon a number of issues: the respective roles of the General Assembly, Economic and Social Council and functional commissions were examined and certain recommendations made for their improvement; the importance of policy guidance within the framework of the Agenda for Development was highlighted; the need for consolidated reporting was stressed; the potential benefit was emphasized that could be derived from closer co-operation between funds and programmes, regional commissions, specialized agencies including the Bretton Woods institutions, and the World Trade Organization; the harmonization and coordination of the agendas and work programmes of the functional commissions was called for, to promote a clearer division of labour among

them and with the aim of sustaining and strengthening the quality and impact of their output; the role of regional commissions was reaffirmed in their provision of assistance to countries in each region in the implementation of the recommendations of conferences; the need was recognized for closer and improved interaction between the Economic and Social Council and the Committee for Programme and Coordination. The Council also recommended that the role of ACC and its standing committees be further strengthened and called for the systematic exchange of information and rational division of labour between the established ACC machinery and *ad hoc* mechanisms set up in the context of the follow-up to individual conferences. Finally, the Council indicated the importance of enhancing the effectiveness of official development assistance (ODA) and increasing its amount as soon as possible with the objective of achieving the accepted United Nations target of 0.7 per cent of gross national product for ODA, as reaffirmed by UNCED in Chapter 33.13 of Agenda 21 and by other relevant international conferences such as ICDP and the World Summit for Social Development. The mobilization of substantial new and additional resources from all sources, domestic and international, public and private, and from traditional and new sources in accordance with the relevant provisions of the programmes of action, would also be instrumental for the implementation of relevant programmes.

27. In a related development, UNDP has proposed the establishment of inter-agency task forces to provide coordinated technical and other assistance in support of priority objectives established at recent United Nations conferences. The five areas that would be addressed by these task forces are:

(a) Basic social services for all;

(b) Access by the poor to productive assets and livelihoods and full employment;

(c) Enabling environment for poverty eradication and social development;

(d) Gender equity and advancement of women;

(e) Sustainable agriculture, food security and environmental resources.

The proposal is being considered by the relevant inter-agency coordination bodies, of which UNIDO is part.

VII. ACTION REQUIRED OF THE CONFERENCE

28. The Conference may wish to take note of the present report and to make recommendations for further follow-up by UNIDO.

Distr.
GENERAL

GC.6/24
4 October 1995

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Sixth session
Vienna, 4-8 December 1995
Item 9 (c) of the provisional agenda

INDUSTRIAL DEVELOPMENT AND COOPERATION ACTIVITIES: DEVELOPMENT OF HUMAN RESOURCES FOR INDUSTRY

Report by the Director-General

Summary

Reports on the implementation of UNIDO activities for the development of human resources for industry, in compliance with General Conference resolution GC.5/Res.2 and decision IDB.13/Dec.3 of the Industrial Development Board.

CONTENTS

		Paragraphs	*Page*
Introduction		1 - 3	2
Chapter			
I.	THE CONTEXT	4 - 7	2
II.	A NEW HRD PARADIGM FOR CAPACITY-BUILDING	8 - 11	2
III.	CLIENT-ORIENTED HRD PLANNING	12	3
IV.	HRD FOR INDUSTRY: PATTERNS, STRATEGIES AND ACTION PROGRAMMES	13 - 15	3
V.	THE NEW PARADIGM AT WORK	16 - 28	3
VI.	ACTION REQUIRED OF THE CONFERENCE	29	5

V.95 57839 (E) (b:\1995\pmo.14)

Distr.: 17 October 1995

Introduction

1. As one of the five development objectives of UNIDO, development of human resources for industry is covered in one of the sections of chapter II of the *Annual Report of UNIDO 1994*, which reviews the activities of the Organization that primarily address that development objective.

2. At its fifth session, in resolution GC.5/Res.2, the General Conference, while endorsing Industrial Development Board decision IDB.11/Dec.3, requested the Director-General: to address in particular the needs of managerial training and human resources development in the areas of technology and management, quality control and productive techniques; to strengthen institutions in developing countries to enhance their capacity for national execution of development cooperation projects; to assist in the assessment of changing skill requirements and in strengthening the capacities of industry, especially industrial associations for human resources development; and to report on the implementation of the resolution through the Board to the Conference at its sixth session.

3. The report of the Director-General (GC.6/5-IDB.13/12, chap. I) was presented to the Board at its thirteenth session. On that occasion, the Board in its decision IDB.13/Dec.3 requested the Director-General to further develop and strengthen the human resources development activities of UNIDO in a number of areas, to continue to mobilize extrabudgetary resources in support of these activities, and in his report to the General Conference on the implementation of resolution GC.5/Res.2, to comment also on the implementation of the recommendations of the in-depth evaluation of UNIDO human resources development activities prepared by the UNIDO Evaluation Staff. The present report has been prepared in compliance with the latter request.

I. THE CONTEXT

4. As pointed out in the 1993 in-depth evaluation of UNIDO industrial human resources development activities of UNIDO (IDB.11/CRP.3, annex), human resources development (HRD) has traditionally been associated almost exclusively with training, while in fact HRD broadly relates to enhancing the application of updated knowledge and improved skills in industry and the resulting impact on socio-economic development. (In keeping with the in-depth evaluation and ongoing re-structuring efforts, particular attention has been directed to creating a comprehensive framework and integrated approach to HRD.) The core of this comprehensive approach to HRD links supply elements of education and skills planning and demand elements of employment and changing labour market conditions.

5. UNIDO's new HRD concept and programme approaches were the basis for position papers for the 1995 United Nations World Summit on Social Development in Copenhagen, for the Fourth World Conference on Women just concluded at Beijing and for a contribution to a United Nations General Assembly report on human resources development.

6. With the aim of enhancing developing countries' industrial productivity and competitiveness in the globalized production system, the HRD programme has been refocused to assist developing countries as well as economies in transition to build up a critical mass of entrepreneurs, managers, technicians and technology-support professionals. To this end UNIDO has established a demand-oriented, integrated HRD programme in three primary activity areas, interlocking at three levels of support:

(a) Upstream services, including policy advice based on analysis and assessment of requirements;

(b) Institutional capacity-building and catalytic learning systems, including training, at subsector levels and in specialized fields;

(c) Communication networks to facilitate coordination, synergy of efforts, interaction and a flow of information.

7. To enable UNIDO clients to make an informed and qualitative selection of learning opportunities in industrial development, the *Guide to Training Opportunities for Industrial Development* has been revised. The Guide is being targeted for Internet access by the first quarter of 1996, thus functioning as a truly global network and reliable source of information among HRD practitioners.

II. A NEW HRD PARADIGM FOR CAPACITY-BUILDING

8. The conceptual framework for UNIDO capacity-building measures in HRD covers three elements: knowledge-based products; delivery mechanisms; and support infrastructure. The term "products" is used to emphasize the rising need to disaggregate and organize learning experiences into modules, and then to package these "products" into more user-friendly and flexible sets of integrated activities that match labour force needs.

UNIDO's HRD modular learning experiences impart technical skills and knowledge, while improving professional abilities and personal attitudes necessary for sustainable industrial development.

A. Delivering a modular learning experience

9. Modular learning experiences can best be provided through a combination of flexible delivery mechanisms taking into account: infrastructure suited for the beneficiaries; access to necessary hardware and software; and the characteristics of the target recipients, including know-how. These delivery mechanisms include lectures and seminars, interactive computers, correspondence courses, videos and television, radio and hands-on experience. A modular learning experience focuses on one delivery mechanism as a core medium, while other vehicles are used as re-enforcing media.

B. HRD support infrastructure

10. The successful delivery and outcome of knowledge-based products is directly related to the effectiveness of support infrastructure put into place by a host Government or an enterprise. At the macro-level, assistance is directed towards strengthening national policies and guidelines, as well as in formulating HRD laws and regulations. Institutional linkage and feedback mechanisms between the public and private sectors are considered, and standards and quality control introduced in line with international norms. At the micro-level, the private sector is relied upon for local capacity-building, implementation of post-service support programmes and open access to information sources.

C. The HRD Branch and the new paradigm

11. Within this conceptual framework the HRD Branch, assisted by a group of international advisers, undertook a review of its activities to verify and help determine UNIDO's niche for HRD based on the needs of client countries and its comparative advantage, and to specify UNIDO's cooperation and coordination with other United Nations agencies. The following sections provide a brief overview of three distinctive but interrelated sets of outputs and activities undertaken.

III. CLIENT-ORIENTED HRD PLANNING

12. The main point of departure for creating a product or service is the desired outcome for a particular client. Conventional approaches have made limited contributions to effective outcome-oriented planning. To address this issue, an innovative methodology designed to assist industrial entrepreneurs and government officials was developed and tested. The methodology has been incorporated into the design and implementation of group training programmes as part of intensive efforts to reform such programmes. Examples are the awareness-building seminars on quality management and quality improvement of industrial products for Asian countries, and on the preparation, evaluation and management of industrial projects for African countries.

IV. HRD FOR INDUSTRY: PATTERNS, STRATEGIES AND ACTION PROGRAMMES

13. The design of appropriate policies, strategies and programmes for building up a critical mass of resourceful women, men and youths able to make the desired impact requires the analysis of interactions between components of an HRD system for industry. Such analysis facilitates the disaggregation of labour market needs, the identification of constraints and bottlenecks prevailing in the system, the identification of solutions to eliminate constraints, and the design of HRD strategies and programmes to promote a balanced development of the system.

14. An analytical model cum road map was devised covering the above components and indicators, including gender issues, that succinctly analyse prevailing patterns of HRD. The model was applied to a preliminary study of the HRD terrain in Latin America and the Caribbean.

15. An over-arching framework for defining policy strategies for HRD programmes and for ensuring integration of all in-house activities was developed. The framework has also served to develop methods of inter-agency cooperation and coordination on the basis of comparative advantage. One result is a university-industry linkage mechanism (GRIP: Graduate Resources Integration Programme), with a specific proposal for a UNIDO-UNESCO programme in the Russian Federation. Consolidating the complementary comparative advantages of the three partners, the proposed programme is expected to match labour output from institutes of higher education and the labour needs of industry.

V. THE NEW PARADIGM AT WORK

16. Technical cooperation undertaken by UNIDO in HRD responds directly to the concerns of Member States as expressed in General Conference resolution GC.5/Res.2 and Board decision IDB.13/Dec.3. Particular emphasis has been placed on local capacity-building exercises that highlight issues relevant to mainstreaming women, technology transfer, project appraisal and preparation, restructuring and privatization, investment promotion, environment protection, energy, and small and medium enterprises.

17. Based on the new conceptual framework, attention has been directed towards strengthening the enabling environment to support sector- and industry-specific HRD programmes implemented by various UNIDO divisions and branches. Assistance has been provided to Governments in formulating an integrated HRD policy and strategy through dialogue with key representatives from ministries of finance, industry, trade, education, and labour, professional associations, and chambers of commerce to gauge demand-side inputs into HRD planning.

18. UNIDO's restructured HRD conceptual framework and programme have been the basis for specific contributions to the following international events and inter-agency exercises:

(a) Conference of African Ministers of Industry, twelfth session, Gaborone, Botswana (June 1995);

(b) International conference on human resources development in a changing world, Melbourne, Australia (July 1995);

(c) University-industry cooperation conferences in Accra, Ghana, and Port-of-Spain, Trinidad and Tobago (both in September 1995).

Additional examples of the application of the new conceptual framework in recent UNIDO activities are provided in the *Annual Report of UNIDO 1994* (IDB.14/10, chap. II.A, para. 61).

19. A paper was prepared for the conference of Ministries of Industry in Latin America on the pilot test application of the new HRD analytical model to the HRD-industry system in the region. The strategies and programmes derived are specific to each identified pattern of HRD, and are applicable at the country level. The results will be of major benefit to developing countries. They will also be valuable to other United Nations organizations and to bilateral donors.

20. Four awareness-building seminars for entrepreneurs, managers, policy makers and senior government officials were held in 1995 for Africa, Asia and Latin America and the Caribbean on such topics as project management, technology management and quality.

21. A wide range of technical cooperation projects that highlight HRD activities have been implemented by UNIDO. The examples cited in the present document illustrate the large set of activities and provide insight into ongoing, in-depth substantive work.

A. Macro-level support

22. Macro-level HRD support activities are included in enterprise development and strengthening efforts to assist public enterprises restructure and/or privatize and improve quality and standardization. For example, environment management in the Danube River Basin has been designed to expand environmental awareness and capacity-building at the policy level through lectures, seminars and workshops.

23. Within the context of a broader national policy integrating HRD concerns, sector- and industry-specific activities have been directed to national capacity-building through the training of trainers in information resource management and the effective use of electronic network systems to disseminate market and industry data to local enterprises. Similar HRD-related programmes take advantage of and strengthen indigenous capacities of local intermediaries such as professional associations, chambers of commerce and non-governmental organizations as a means of delivering programmes in tune with specific local needs.

24. As described in the *Annual Report of UNIDO 1994* the revision of the training programme on industrial planning in Japan led to a new seminar on technology management and industrial development (ibid., para. 64). Participants from five developing countries benefited from the practical sessions and study visits, which provided Japanese knowledge and experience in technology transfer and production processes. The second phase of a training programme to promote women's participation in the modernization process of China is now under way. The programme emphasizes catalytic learning experiences through the training of trainers for women entrepreneurs. Quality and laboratory managers in the Hungarian food industry took part in a course on quality management in Budapest in September 1995. A training of trainers course will be held in the area of agro-food product packaging in Morocco in October-November 1995.

B. Micro-level support

25. At the enterprise level, a wide range of sector- and industry-specific HRD programmes have been implemented, e.g. training of trainers to conduct project appraisal and preparation of investment projects in developing countries, outreach and capacity-building exercise for women in small-scale agro-based enterprise workshops, and pilot training programmes to improve energy efficiency. Examples of enhancing local capacity to manage industry-specific technology transfer include an Africa-wide training course on footwear technology and training for trainers of leather manufacturing

technology, tannery machinery maintenance and pollution control in the leather industry.

26. A regional workshop for Arab LDCs was held in June 1995 for engineers and technicians on critical maintenance issues. Under the same entrepreneurship umbrella programme that was pilot tested for women textile entrepreneurs in Kenya's informal sector (*Jua Kali*), a project is also under way to upgrade technology and enhance the technical and entrepreneurial capabilities of the Jua Kali Ziwani Motor Mechanics Association.

C. Responding to changing demands

27. The varied activities and sectoral areas mentioned above reflect the change taking place in UNIDO's approach to a comprehensive and integrated HRD programme. The new conceptual framework was devised in response to the findings of the in-depth evaluation of UNIDO HRD activities. The options approach was seen as a useful means of categorizing activities perceived to be needed for developing in-house HRD capacity in UNIDO. However, this approach limited alternative paths for developing HRD activities as both in-house organizational demands (budget reallocation and funds mobilization) and external socio-economic conditions change. In effect, the options approach eliminated the prospect of employing a truly dynamic process of building in-house capacity and delivering an integrated HRD programme, a critical factor for HRD planning at a time when rapid technological and market change are viewed as normal processes.

28. As the review mentioned in paragraph 11 above took place during a UNIDO-wide reform process, inputs to and from the reform exercise were taken into consideration. Specifically, the work of the HRD Branch was reviewed in terms of efficiency measures and issues related to the elaboration of the seven priority themes. The consolidation of these activities will help UNIDO define a new trajectory for HRD programmes, especially within the context of sustainable industrial development and inter-agency cooperation.

VI. ACTION REQUIRED OF THE CONFERENCE

29. The Conference may wish to take note of the information contained in the present document and provide guidance for follow-up action.

Distr.
GENERAL

GC.6/25
11 October 1995

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Sixth session
Vienna, 4-8 December 1995
Item 9 (h) of the provisional agenda

INDUSTRIAL DEVELOPMENT AND COOPERATION ACTIVITIES: PRIVATE SECTOR DEVELOPMENT

Private sector development, industrial rehabilitation and modernization

Progress report by the Director-General

Summary

Reports on the implementation of Industrial Development Board decision IDB.13/Dec.15 on private sector development as well as General Conference resolution GC.5/Res.4 and Board decision IDB.13/Dec.5 on industrial rehabilitation and modernization.

CONTENTS

		Paragraphs	*Page*
Introduction		1	2
Chapter			
I.	THE CONTEXT	2 - 11	2
II.	POLICY-LEVEL SERVICES	12 - 20	3
III.	INSTITUTIONAL-LEVEL SERVICES	21 - 25	4
IV.	ENTERPRISE-LEVEL SERVICES	26 - 41	4
	A. Scope and approach of the programme	27 - 29	4
	B. Implementation of the programme	30 - 38	4
	C. Cooperation with regional and other relevant organizations	39 - 41	5
V.	ACTION REQUIRED OF THE CONFERENCE	42	6

V.95 57778 (E) (b:\1995\gmo.16)

Distr.: 19 October 1995

Introduction

1. In its resolution GC.5/Res.4 the General Conference recognized the increasing role of the private sector in industrial development and the need for UNIDO to take into consideration supporting the development of the private sector in its programmes and projects. In that context the Conference approved the UNIDO programme for industrial rehabilitation and modernization (GC.5/12/Rev.1) and requested the Director-General to cooperate with regional organizations assisting developing countries in industrial rehabilitation and modernization and to take into consideration the activities of relevant organizations in the field of privatization and cooperate with them. The Director-General was requested to present to the Conference at its sixth session, through the Board, a report on the implementation of resolution GC.5/Res.4. The report of the Director-General (GC.6/5-IDB.13/12, chap. III) was presented to the Board at its thirteenth session. The Board in its decision IDB.13/Dec.5 requested the Director-General, in implementing the revised UNIDO programme for industrial rehabilitation and modernization: (a) to continue to cooperate with regional and other relevant organizations in assisting developing countries in their industrial rehabilitation and modernization, including privatization, and to develop joint programmes for industrial restructuring within the framework of cooperation agreements between UNIDO and such organizations; (b) to continue to mobilize resources from international financial institutions in support of activities under that programme; and (c) to report on the implementation of the decision to the General Conference at its sixth session. Also at its thirteenth session, in decision IDB.13/Dec.15, the Board requested the Director-General to pursue a number of specific services that UNIDO could offer to developing countries in private sector development.

I. THE CONTEXT

2. Developing countries are increasingly recognizing the role of the private sector and of the market for efficient resource allocation and for the successful international integration of their economies. In an increasingly competitive global environment enterprises are forced to build up their resilience and their capability to adjust and compete both in the national and international product markets.

3. Many enterprises in developing countries face major constraints in their endeavours to enhance their competitiveness. Often shielded from competition by restrictive government policies, they have previously had little incentive to be efficient. A sudden exposure to fierce competition from well advanced and endowed foreign companies will require significant rapid adjustments. These adjustments need to be carried out in a situation of financial and foreign exchange constraints, with obsolete or poorly maintained equipment and facilities, and with a too large and undertrained workforce.

4. In this situation, private enterprises need external support and guidance. First, basic conditions and an enabling environment need to be created for a competitive industrial sector to develop. Government and the business community will have to share the responsibility for this task.

5. For Governments, the task is to make a transition from a controlling and protecting role to one that stimulates industry and facilitates its restructuring. This means, *inter alia*, ensuring overall economic stability and competition, building up essential physical and institutional infrastructure and establishing a functioning capital market. Policies may be necessary to promote regional development, an industry-oriented educational system, entrepreneurship development, industrial innovation and other essential dimensions of national competitiveness. Industrial associations and chambers of commerce face major tasks to provide essential information and other support services to members, and to communicate the concerns of private enterprises to national policy makers.

6. UNIDO support to the development of the private industrial sector addresses some of these issues at three levels: government policy, organizations and institutions, and enterprises.

7. The strategy of the Organization for assisting private sector development is determined by the actual demand for UNIDO services from developing countries and countries in transition, the supply capacity of UNIDO and the availability of financial resources. The framework for UNIDO programmes in this field are, however, the Organization's thematic priorities as laid down in document IDB.14/13.

8. The seven themes elaborated in that document provide the basis for UNIDO support to private sector development. Thus, one area is strategies, policies and institution-building for global economic integration. Within this theme, UNIDO advisory assistance in respect of establishing a market-based economic system with a well-functioning private industrial sector focuses on two interrelated issues:

(a) Services in support of industrial development strategies, policies and programmes as well as institution-building;

(b) Capacity-building, which concentrates on enhancing the ability of: (i) Governments and regional

authorities to formulate and implement industrial strategies; (ii) private sector organizations to deliver services to industry and to participate in policy-making and implementation.

9. Other major themes also refer to support to private industries, such as the programmatic theme on rural industrial development, which includes the issue of regional development.

10. Thus, the main services provided by UNIDO in support of private sector development cover areas such as: industrial policy formulation and implementation, including interactive policy formulation systems; regional development; seminars on market economies; industrial restructuring; organizational enhancement of government agencies; creation of corporate groups; promotion of business organizations; industrial estates, science and technology parks and export processing zones.

11. Chapters II and III below report on measures taken at the policy and institutional levels respectively in line with Board decision IDB.13/Dec.15. Chapter IV covers the enterprise level and reports on the implementation of Board decision IDB.13/Dec.5. That chapter also updates the information on industrial rehabilitation and modernization contained in document GC.6/5 (chap. III) and should be read in conjunction therewith.

II. POLICY-LEVEL SERVICES

12. UNIDO provides advisory services to national policy makers in close cooperation with the business community on the formulation of industrial policies conducive to private sector development. The services aim at the creation of an enabling environment for industrial development in general and regional development of private industry in particular. Assistance to restructuring of public sector enterprises is another key area of services. Some examples of these services are shown below.

13. In support of Ghana's private sector development programme, cooperation between the Government and the business community will need to be enhanced. To this end, UNIDO will assist in identifying industrial development priorities and in setting up a consultative mechanism facilitating interactive policy formulation and action programmes. This innovative approach ensures that the private sector is involved in and empowered to contribute to policy formulation and implementation in genuine partnership with the Government.

14. In Georgia, the UNIDO programme of policy advisory services reviewed the public manufacturing sector and made recommendations on its future management, restructuring and training for factory managers and staff. A series of follow-up projects is being developed.

15. In the Republic of Moldova, policy advice is provided in support of private sector development. In the context of an ongoing programme on small and medium enterprises (SMEs), this project aims at creating an institutional, legislative and regulatory environment conducive to new and newly privatized industries.

16. A development programme will be formulated for the heavily industrialized Sumgait region of Azerbaijan. UNIDO will carry out a survey of the industrial development potential and formulate a regional development concept for revitalizing the sector and for building up the necessary institutional infrastructure.

17. A workshop on the implications of the North American Free Trade Agreement on industries in Caribbean countries is to be held in Trinidad. The intention is to increase awareness of the challenges emerging from the Agreement for manufacturing industry and industrial services in the region, and to recommend action to be taken by Caribbean countries to enhance the subregion's competitiveness.

18. A workshop for Algerian policy makers on industrial restructuring in the framework of policy reforms in Algeria addressed long-term industrial growth issues, prerequisites for successful privatization, privatization instruments, the institutional set-up and the government-industry interface for sound industrial policy formulation.

19. With UNIDO assistance a medium-term industry and trade strategy is being developed for Viet Nam through a comprehensive, integrated support programme. It has several aspects: policy advice based on a detailed assessment of the industrial sector and its comparative advantages; elaboration of action programmes; and the strengthening of required capacities, in line with the Government's new role in the economy. The project integrates statistical intelligence management, investment promotion, regional development planning and institutional reform and thus contributes to capacity-building in various key fields.

20. Also in Viet Nam, UNIDO carried out a study on the prospects for industrial development in the Red River Delta region through integration with agricultural and infrastructural development plans. This project took place in the context of a large United Nations Development Programme/World Bank programme for the region.

III. INSTITUTIONAL-LEVEL SERVICES

21. On the basis of its wide international experience, UNIDO advises on the evolving role of Government, a role which, in most countries, is moving from regulation to facilitation. At the private industry sector level, UNIDO assists in establishing and strengthening institutions such as chambers of commerce and industry and professional organizations, thus ensuring their effective integration in policy-making. Support is also provided to the establishment and effective operation of industrial infrastructure. The following examples of such activities illustrate their range.

22. In Albania, an assessment was undertaken of the structure and staff resources of the Ministry of Mineral Resources and Energy. As a result, a thorough restructuring plan was elaborated, commensurate with the new role that the Ministry is to play in a market economy system. A workshop on enterprise restructuring and new management methods was held and a detailed analysis of restructuring requirements of the oil industry was carried out. A comprehensive training programme is under formulation.

23. The Federation of Chambers of Commerce in Nepal was assisted by UNIDO in the setting up of an industrial information base, and in training of its professional staff, including aspects of participation in trade fairs, etc.

24. In Mauritania, the General Federation of Employers is to be given organizational support to improve its delivery of services to national and foreign entrepreneurs in the small- and medium-scale sector, and to develop a portfolio of projects.

25. The Government of Swaziland will be assisted in assessing the viability of the export processing zone concept as a policy option for investment and export promotion as well as employment generation. Pipeline projects have been formulated for the creation of a special customs area in Uruguay and Argentina.

IV. ENTERPRISE-LEVEL SERVICES

26. As mentioned in paragraph 11 above, the present chapter focuses on activities carried out within the UNIDO programme for industrial rehabilitation and modernization and should be read in conjunction with chapter III of document GC.6/5. To facilitate the reading, reference is made under each title to the relevant paragraphs of that document.

A. Scope and approach of the programme (paras. 78-82)

27. This area of UNIDO activities experienced a change in thrust and scope in late 1994 and particularly in 1995. The increasing globalization of markets, trade and production (as a consequence of the Uruguay Round Agreements) had strengthened the focus on competitiveness as an issue, integrating attention to quality and certification to ISO 9000 standards as a dominant feature. This led to a rearrangement of programmes within the Human Resource, Enterprise and Private Sector Development Division resulting in a move of the quality-related programme complex to the Enterprise Development and Restructuring Branch. The rationale was to join all technical cooperation activities in support of enterprise-level competitiveness under one umbrella. This approach was further refined in the context of the preparation of the proposals for the programme and budgets, 1996-1997, and the elaboration of the programmatic themes as described in document IDB.14/13 on the strengthened focus of UNIDO activities. On the basis of the formulation of theme 4 (innovation, productivity and quality for international competitiveness), the work of the Enterprise Development and Restructuring Branch will be directly and exclusively relevant to components 4 (a) (quality management) and 4 (b) (enterprise restructuring and rehabilitation, including privatization).

28. In addition to competitiveness, it is particularly the concept of "marketization" (a business environment in which all companies have to respond to the same market-driven conditions) that needs to be introduced or strengthened, so as to prepare countries and enterprises to cope with the realities of market liberalization. Marketization is a particularly important feature in restructuring and privatization programmes in former command economies or countries with weak private sectors where state-owned operations dominate whole industrial subsectors. A clear link to overall private sector and particularly small and medium industries and entrepreneurship development needs to be acknowledged.

29. In 1995, UNIDO thus has had to respond to new demand voiced by countries with economies in transition in all regions.

B. Implementation of the programme (paras. 83-92)

30. Further examples are given below of recent UNIDO activities carried out under the four subprogrammes, which have been enhanced by a component on quality management.

Assistance to industrial enterprises in improving performance towards (re)attaining economic and technical viability

31. Assistance commenced in previous years continued in several African countries such as Ethiopia and the United Republic of Tanzania. The influence and consequences of the Uruguay Round Agreements in relation to the competitiveness of African enterprises will be examined in a group of African countries. Training programmes for improvement of management capabilities were conducted in Poland and Romania and will be delivered in Moldova before the end of 1995.

Advisory services at the policy and institutional levels

32. In addition to the services mentioned in chapters II and III above, policy and institutional issues are also addressed in the context of restructuring/privatization and the quality complex since they are intimately related. Such services are being requested for example by Angola, for which a large scale re-dimensioning programme has been designed and is being updated in light of requirements stipulated by the World Bank for funding approval.

Promotion of direct investment and mobilization of financial resources as key inputs to the industrial restructuring and privatization processes

33. A cost-shared workshop is planned together with UNCTAD for mobilization of funds to continue successful privatization activities in Uzbekistan. The workshop will present the country overall as well as industrial investment opportunities and will endeavour to broaden the range of investors and joint venture partners. Invitations have also been extended to international financial institutions, the International Chamber of Commerce, multinational companies and export credit agencies, such as Japan's EXIM-bank.

Advisory services and assistance in the context of restructuring, rehabilitation, modernization and privatization

34. Interest in the privatization component of the programme is growing. Activities in Peru, Sri Lanka, Sudan and Uzbekistan are ongoing and will serve as case studies for countries with similar backgrounds and sets of problems. In an attempt to disseminate an analysis of experiences and widen the acknowledgement of UNIDO know-how and approaches, a particular effort has been made to develop project and programme modules in a team effort involving different organizational units. This approach takes advantage of the wide range of expertise in the Organization in assisting enterprises from different industries and subsectors with their requirements for assessments or restructuring. Privatization will thus become one of the team efforts tapping particularly the sectoral know-how in UNIDO and elaborating standard packages and modules for programmatic issues, such as creation of a social safety net linked to SME development, entrepreneurship development and training and reskilling and environmental concerns and clean-up in the turn-around processes.

35. Such programme clusters have been set up in Moldova, Romania, Uzbekistan, and are in the make for Albania and Kazakhstan. Austrian cost-sharing will be instrumental for the packaging of a land-registration module as an important standard feature in private sector development and privatization programmes for countries such as Yemen and some countries in Central Asia.

Quality management

36. Quality, standardization and metrology (QSM) is part of the competitivity enhancement programme championed by UNIDO. As an integrated programme, QSM includes inputs at the policy, institutional and enterprise levels comprising design of a quality policy, and support in the establishment and strengthening of standardization bodies, which in turn will help to create adequate infrastructure for private and public sector industrial development.

37. Particularly high demand for UNIDO services is noted in the field of ISO 9000. UNIDO assistance aims at providing access certification to ISO 9000 standards as an effective means to increase competitiveness and attract investment. For maximum impact, the UNIDO strategy comprises support to policy-making and planning institutions and technical cooperation at the enterprise level with the aim to achieve ISO 9000 certification.

38. In 1994, UNIDO finalized the systems approach for continuous quality improvement developed during the implementation of the regional programme for modernization of the capital goods sector in Latin America. Two application software packages were developed known under the acronyms of BEST (Business Environment Strategic Toolkit) and FIT (Financial Improvement Toolkit). They are being tested by more than 90 enterprises and UNIDO plans to disseminate them world-wide after completion of the English, French and Spanish language modules.

C. Cooperation with regional and other relevant organizations (paras. 93-97)

39. Exchange of privatization experience within the region can be an important factor in achieving progress. Besides participating in the Central and Eastern

European Privatization Network, UNIDO is now joining the effort to establish a regional network for Asia under World Bank leadership. Building on successful cooperation with the World Bank in the Middle East, UNIDO will participate in a seminar in Islamabad, Pakistan, in November 1995, when the Asian network will be inaugurated.

40. In Africa, UNIDO is now exploring the feasibility of a regional network programme under an Industrial Development Decade for Africa project. Once the feasibility has been established, financing will be sought for network activities.

41. UNIDO has been an active participant in the Organisation for Economic Cooperation and Development (OECD) Advisory Group on Privatization. In addition to participating in substantive technical meetings, UNIDO hosted the semi-annual meeting of the Group in September 1994.

V. ACTION REQUIRED OF THE CONFERENCE

42. The Conference may wish to take note of the information contained in the present document and provide guidance for further action.

Distr.
GENERAL

GC.6/26
2 October 1995

United Nations Industrial Development Organization ORIGINAL: ENGLISH

GENERAL CONFERENCE

Sixth session
Vienna, 4-8 December 1995
Item 9 (f) of the provisional agenda

INDUSTRIAL DEVELOPMENT AND COOPERATION ACTIVITIES: INTERNATIONAL COOPERATION IN INDUSTRIAL INVESTMENT AND TECHNOLOGY, INCLUDING COOPERATION AMONG DEVELOPING COUNTRIES

Development and transfer of technology

Report by the Director-General

Summary

Reports on the implementation of decision IDB.13/Dec.4, and updates information contained in chapter II of document GC.6/5-IDB.13/12.

CONTENTS

		Paragraphs	*Page*
Introduction		1	2
Chapter			
I.	INCREASE OF TECHNOLOGY FLOWS	2 - 8	2
II.	DEVELOPMENT AND USE OF INDIGENOUS SCIENTIFIC AND TECHNICAL CAPACITY	9 - 14	3
III.	TECHNOLOGY MANAGEMENT	15 - 19	4
IV.	MONITORING NEW AND EMERGING TECHNOLOGIES	20 - 22	4
V.	IDENTIFYING OPPORTUNITIES AND CONSTRAINTS IN THE ACCESS TO TECHNOLOGY BY DEVELOPING COUNTRIES	23 - 24	5
VI.	INFORMATION SERVICES	25 - 30	5
VII.	ACTION REQUIRED OF THE CONFERENCE	31	6

V.95 57668 (E) (b:\1995\pmo 14)

Distr.: 12 October 1995

Introduction

1. The Board in its decision IDB.11/Dec.20 and the General Conference in its resolution GC.5/Res.3 requested the Director-General to promote certain options in the implementation of UNIDO activities on development and transfer of technology, to continue his efforts to monitor and evaluate new and emerging technologies that might be beneficial to the developing countries, and to examine constraints in the access to and transfer of technology to developing countries, with a view to identifying remedies to them through cooperation with other relevant organizations. The Conference also requested the Director-General to provide information services to industry to facilitate the widest possible access of developing countries to technological information on industrial subsectors and strengthen the functions of the Industrial and Technological Information Bank accordingly; and to report on the implementation of resolution GC.5/Res.3 through the Board to the Conference at its sixth session. The report of the Director-General (GC.6/5-IDB.13/12, chap.II) was presented to the Board at its thirteenth session. In its decision IDB.13/Dec.4, the Board addressed further requests to the Director-General in the continued implementation of UNIDO activities on development and transfer of technology, including a report thereon to the Conference at its sixth session. The present text responds to that request and provides information on developments that have occurred since the issuance of document GC.6/5.

I. INCREASE OF TECHNOLOGY FLOWS

2. UNIDO has evolved a strategy giving central focus to activities leading to the strengthening, integration and promotion of innovation and technology flows to developing countries. This implies the building up of the internal capability within enterprises for effective, adequate and continued application of technology for sustained competitiveness while at the same time creating an environment conducive to technology innovation and access to international technology flows. It also implies the need to make the demand for technology at the plant level conscious and explicit.

3. Assistance in identifying technological innovation needs for sustainable competitiveness is one of the key elements of the UNIDO strategy. This involves for instance, guidance in the technological diagnosis of competitive position of firms, identification of critical technology choices and evolution of their technology strategy. At the institutional level, it includes support for technology management centres and the establishment of new R and D centres or the revitalization of such centres so that they can play an active role in the process of technology selection, adaptation and innovation towards increased competitiveness.

4. Special attention is given to the promotion of enterprise-to-enterprise technology partnerships through the Techmart programme. InTechmart (Investment and Technology Market) is a recent development that combines in a Techmart activity, information, technological and investment considerations of business operations. This new concept was successfully implemented in the India InTechmart that took place at New Delhi, India, from 24 to 27 March 1995, and which reaffirmed the effectiveness of the programme, in its modified version, in providing project promoters, investors, technology sellers and buyers and research and development institutions with a unique setting for the conclusion of technology and joint venture agreements. The success of this event has led to requests for the same approach from India again (for 1996) and Indonesia.

5. A Techmart was held in Viet Nam in 1994, and another will take place at Lusaka, Zambia, for the Common Market for Eastern and Southern Africa in October 1995. Additional features deriving from existing UNID services are constantly being introduced in Techmart events to improve the quality of advisory and other services, feasibility studies, technology transfer negotiation workshops and technology status report preparation for a particular sector in a given country, as well as follow-up surveys with foreign and national participants. Special technological aspects being promoted include environmental technology (Entechmart) and solar energy (Suntechmart). The demand for this type of activity has been significant, with requests received from Brazil, China, Mexico, Namibia, Pakistan, Slovakia, Thailand and Venezuela. However, response to these requests is constrained by limited staff resources.

6. With regard to facilitating effective application of technology in developing countries, UNIDO is involved in a number of activities. At the International Textile and Garment Conference (Brazil, July 1995), UNIDO presented state-of-the-art technologies now being applied in the textile and garment industry, as well as quality control and environmental protection in the production of textiles. Another area being addressed is the chlorine-free production of straw pulp in China and the improvement to international standards of the quality of jute pulp in India. A workshop was also held on environmental management for pulp and paper production in Slovakia in April 1995. Within the framework of implementing the Montreal Protocol, assistance is being rendered to some 30 countries, e.g. in the Islamic Republic of Iran in the conversion of domestic refrigerator production plants that involved the training of 10 Iranian experts in Germany. Technicians from six African countries

(Benin, Congo, Kenya, Nigeria, Uganda and Zambia) were trained in designing, manufacturing and testing hydraulic maintenance presses, enabling them to manufacture the prototypes they designed in their respective countries.

7. Sectorally-focused technology transfer projects currently under implementation also lend assistance in the effective application of and increased flows of technology to developing countries. Examples include: technology selection for black liquor recovery (Egypt); in the pharmaceutical industry, biotechnological treatment of wastes (Jordan); technology for catalysts used in petrochemicals and the fertilizer industry, and energy transport vessel design and construction for coal transport (China); introduction of a new technology involving utilization of nile perch skin for production of fish skin leather in lieu of endangered species skin (African countries).

8. Other technology transfer activities comprise: building materials technology for non-fired stabilized soil blocks (Cameroon); modern technologies for marble quarrying and processing (Brazil, India, Viet Nam); technologies for manufacture of pigments using local non-metallic mineral resources (Mongolia); introduction of prefabricated timber-framed wall elements and trussed rafters in emergency shelter construction (Croatia); secondary treatment of effluents in fish processing and organic material recovery (Chile); modern industrial fan and blower design for local production, leading to energy savings of 30 to 40 per cent (Philippines).

II. DEVELOPMENT AND USE OF INDIGENOUS SCIENTIFIC AND TECHNICAL CAPACITY

9. A UNIDO-developed negotiations training package uses the recently-completed Manual on Technology Transfer Negotiations[1] as the core material. Addressed to institutional and professional instructors for use in organizing or conducting training courses on technology acquisition and negotiation, this package is a key element in the UNIDO product-service concept for its capacity-building programme in technology acquisition and negotiation. A large-scale capacity-building programme is currently under implementation in Brazil, while elements of a similar programme are being introduced in Arab countries and implemented in Africa under a subregional programme.

10. Under five large-scale training programmes for women entrepreneurs currently under UNIDO implementation, businesswomen in Botswana, Central America, Gambia, United Republic of Tanzania and Viet Nam are provided with entrepreneurial awareness, management skills and technical knowledge in establishing and running viable small-scale units in the food-processing sector. Technology choice and technical aspects relating to the commercial production of food comprise one of the main programme components.

11. Increasing emphasis is being placed on revitalization and strengthening of industry technology research institutes in developing countries. In 1995, UNIDO implemented a programme in Arab countries on this subject in cooperation with the United Nations Economic and Social Commission for Western Asia (ESCWA). At present, UNIDO is also undertaking a programme on the revitalization and privatization of the Pakistan Council of Scientific and Industrial Research which will strengthen linkages between the Council's industrial R and D institutes and Pakistani industry. Preparatory work was also undertaken leading to a programme on revitalization of R and D institutes in Africa. Within the framework of a large private sector development and capability-building project, UNIDO has initiated activities leading to a programme to assist the Council for Scientific and Industrial Research of Ghana in the restructuring of its R and D institutes, including the research results of commercialization.

12. In addition to the specific activities on revitalization of R and D institutes, UNIDO monitors and evaluates current trends in the whole industrial innovation process and the linkages between the enterprise, the scientific and technological community and the market place.

13. As a follow-up to a technical cooperation project on training and biotechnology transfer projects on the application of small bioindustries development funded by the Carl Duisberg Gesellschaft (CDG) and incorporated into UNIDO biotechnology programmes, an international symposium on development of small and medium enterprises for biotechnology commercialization in developing countries (sponsored by UNIDO and CDG) was held from 24 to 28 July 1995. In November 1995, this will be followed up by a round-table meeting to formulate a viable and active Philippine biotechnology business association. The project involved developing a model to strengthen local technology institutions, research and development capabilities and technology transfer from a central quality control and training centre, which included resource mobilization through networking arrangements to make them self reliant within a few years. The Quality Control and Training Centre at the University of the Philippines at Los Baños may be used as a prototype in new UNIDO initiatives in biotechnology transfer and commercialization in developing

---

[1] The training package will be on exhibit at the General Conference.

countries by including other biotechnologies such as microbial fertilizers, various food fermentations, bioremediations and biotransformations.

14. Assistance was provided to Hungary in the development of good manufacturing practices guidelines for the whole food industry. These guidelines provide the Hungarian food industry with practical advice on food production technologies that conform with legislative requirements, are safe for the consumer, meet quality standards and are efficient.

III. TECHNOLOGY MANAGEMENT

15. UNIDO is implementing and developing a programme to build and strengthen capacity in developing countries to integrate technology management techniques in their national innovation systems. Activities promote awareness-building and education and cover the different issues of technology management, taking into consideration the technology policy and strategy of government, technological strategic planning of industry and enterprise-level technology management.

16. One example of awareness-building is the project "100 innovative enterprises in Latin America and the Caribbean". The main objective of the project is to identify the critical success factors of the most innovative enterprises in the region and the key managerial characteristics that allowed these enterprises to be competitive in international markets. As a result of the research work of this project, the innovative enterprises will be identified and rewarded and information disseminated on the innovation capacity and experience of successful Latin American enterprises. This exercise will eventually lead to the formulation of policies and strategies to motivate regional industry to further innovate and enhance its competitiveness.

17. An expert group meeting to discuss new and emerging issues on technology policy and management for competitiveness and the role of innovation systems in developing countries will take place by the end of 1995. At this meeting, the main trends in the changing global economic and technological framework will be analysed and opportunities and challenges to competitive industrialization and sustainable development in developing countries will be evaluated. The aim of the meeting is to identify a strategic agenda for UNIDO action on industrial technology policy. UNIDO has also identified and is in the process of negotiating and formulating technical cooperation programmes on the development of national innovation systems in a number of countries, such as Colombia, Ecuador and Ethiopia.

18. Education in technology management is being promoted through seminars, group training and workshops. In April 1995, UNIDO, in cooperation with the Government of Japan, organized a training seminar on technology management and industrial development with participants from India, Indonesia and the Philippines. Training covered basic concepts of technology management and industrial development, the role of flexible production systems and quality control. Emphasis was on technological issues such as policy, productivity, transfer of technology, human resource development and marketing. The development of teaching materials and manuals on technology management techniques is also a basic element of the UNIDO programme in this area. In April 1995, a national workshop on technology management for enterprises was held at Nairobi, Kenya, to sensitize and assist selected Kenyan enterprises in the introduction of modern technology management techniques and instruments in their entrepreneurial undertakings.

19. In the area of new and emerging technologies, national programmes and projects on promotion of innovation, commercialization of R and D and business development are being developed and implemented. Activities aim at strengthening the technological capacity of recipient countries in monitoring and assessment of innovations and at the development of a mechanism for their marketing and commercialization, including industrial application of high technology spin-offs. A national programme has been developed for China to promote technological innovations in large-scale state companies to enhance competitiveness. The programme will be implemented by UNIDO within the framework of a national technology development initiative. Also in China, UNIDO, in cooperation with the United Nations Educational, Scientific and Cultural Organization (UNESCO), has undertaken technical support services at the programme level on management of technological change in an evolving market economy. Preparations have begun on a national project on integrated support to the Russian Federation in promoting innovations. Work has also started on an integrated transsectoral programme on management of technological change in the materials sectors of industry, to be presented at the Global Forum on Industry at New Delhi, India, in October 1995.

IV. MONITORING NEW AND EMERGING TECHNOLOGIES

20. Through its Technology Trends and Monitor series, UNIDO keeps developing countries informed of developments and trends in areas of new and advanced technologies and promotes their commercial application as a means of improving international competitiveness. In addition to a new monitor covering high technology spin-offs published in 1995, a new series on advanced materials technology was released in response to recent

changes across virtually all high technology fields. This publication aims at assisting government policy makers, senior managers in industry and scientists in identifying strategic functions for new materials in industrial and economic competitiveness. Newsletters on Agenda 21, the Lactic Acid Bacteria Network and the Mushroom Biotechnology Network were also issued.

21. Assistance is being provided to developing countries for the establishment of national capabilities for the monitoring and evaluation of new technologies as in a project implemented in Lebanon in 1995. An action programme derived from the UNIDO meeting on cooperation in technology monitoring in developing countries at New Delhi, India, in November 1994, will produce the following outputs: (a) a biennial technology trend report that will present technology monitoring from a developing country perspective; (b) an international network for technology monitoring on the basis of eventual on-line access to multi-country systems; and (c) a technology monitoring manual covering guidelines, case studies, sources for monitoring and country examples and giving particular attention to enterprise users.

22. In line with the recommendations of the United Nations Conference on Environment and Development (UNCED) to strengthen cooperation and increase international cooperation in the field of chemical safety, the inter-organization programme for the sound management of chemicals was established in 1995 by a number of United Nations organizations as well as the Organization for Economic Cooperation and Development with the aim of improving coordination of policies and activities in the sound management of chemicals. Since chemical industries is a main UNIDO thrust area, a strong portfolio of programmes and projects covering industrial aspects of chemical safety was developed and is being implemented. Among the areas covered by these programmes are capacity-building in ecotoxicology and environment monitoring, risk reduction in development of agrochemicals, integrated safety in chemical production and petrochemical complexes, hospital waste management, biodegradation of persistent organic pollutants, good manufacturing practices in pharmaceutical and biotechnological industries.

V. IDENTIFYING OPPORTUNITIES AND CONSTRAINTS IN THE ACCESS TO TECHNOLOGY BY DEVELOPING COUNTRIES

23. UNIDO takes advantage of expert meetings, workshops and similar forums to analyse technology transfer and development features and trends; identify policy issues arising for Governments from such developments; and derive new opportunities for international cooperation. Participation in inter-agency meetings and regular contacts with other international organizations also provide the opportunity for joint analyses and exchange of views on the subject as well as for coordinating appropriate actions.

24. UNIDO has commissioned a study to review and analyse the core provisions of the relevant Uruguay Round Agreements and how they affect the flow and diffusion of technology to developing countries, including the terms and conditions of such flows, and the building up of domestic technological capabilities, R and D and inventive and innovative potential. The end result will be policy and strategy recommendations for consideration by developing countries in order to benefit from the opportunities and cope with the challenges brought about by the Agreements.

VI. INFORMATION SERVICES

25. UNIDO continued its efforts to develop and enhance the access of Member States to information sources covering industrial technologies and investment opportunities; to support the Industrial and Technological Information Bank (INTIB) regional, national and sectoral networks — with a focus on strengthening regional focal points through advisory and inquiry/referral services and provision of UNIDO/INTIB information resources and expanding INTIB national focal points to national information systems. One of these efforts comprises developing and enhancing computer-linked regional networks, while various technical cooperation approaches were developed to provide further support to national focal points.

26. In cooperation with the African Regional Centre for Technology, the regional project for Africa and Arab countries to install INTIB standard database applications and to develop the African network is under implementation. Cooperation was strengthened with the Asia and Pacific Centre for Transfer of Technology as an INTIB regional focal point. In Eastern Europe and the Newly Independent States of the former Soviet Union, a regional workshop on industrial and business information services on enhanced computer links to INTIB regional networks helped to integrate those networks with Investment Promotion Services and subcontracting exchanges (Budapest, Hungary, October 1994). A project for upgrading information services in the region to provide industry and business information for small- and medium-scale enterprises is under implementation.

27. In Sri Lanka, the ITMIN (Industry, Technology and Market Information Network) project is under implementation, with similar projects under consideration for

Bangladesh, Indonesia, Thailand and Viet Nam. Under trust fund arrangements, ITMIN-type projects are being developed for Bolivia, Colombia and Peru.

28. Efforts continued in improving the connection of INTIB focal points to the Internet global communications network and knowledge base. In addition to electronic messaging, this includes access to computerized resources. Projects to provide necessary training in the use of the Internet and other global networks in order to gain access to business, technology and investment information were developed and implemented. The first one was organized in Moscow, from 22 to 26 May 1995, for countries of the Commonwealth of Independent States. In September 1995, the training will be provided to representatives from Central and Eastern Europe at Prague, Czech Republic, for Latin America and the Caribbean at Bogota, Colombia and for selected African countries at Pretoria, South Africa, in the first quarter of 1996. Furthermore, guidelines on information resource management at the enterprise level and for organization of information services and access to business information using Internet were prepared and disseminated to INTIB network members.

29. The Biosafety Information Network and Advisory Service (BINAS) of UNIDO is a versatile vehicle for information and knowledgeable advice on biosafety regulatory issues for regulators, scientists and industry. Available on the Internet since December 1994, its databases on regulations/guidelines, releases of transgenic organisms, experts in biosafety, and biosafety-related bibliography have a proven appeal for users of biosafety data world-wide. The database spectrum is being expanded to include technology-impact assessments and intellectual property rights. Aware of the quality of this information service, other organizations have expressed their willingness to cooperate with BINAS. The Organisation for Economic Cooperation and Development database BIOTRACK has already been included and BINAS recently entered into a collaborative relationship with the Agency for Biosafety Research and Assessment of Technology Impacts of the Swiss National Science Foundation.

30. The input of UNIDO to the Asian Biotechnology and Biodiversity subprogramme of the Farmer-Centred Agricultural Resource Management programme (FARM) has been the establishment of a regional bio-informatics network that offers information on relevant biotechnologies to a wide range of users, from researchers to farmers. In November 1995, under the FARM subprogramme, a regional training workshop will be held at Bangkok, Thailand, co-sponsored by the International Centre for Genetic Engineering and Biotechnology and the United Nations Environment Programme in collaboration with the Crawford Fund (Australia). The workshop will deal with the use of rDNA technologies in biodiversity and biosafety.

VII. ACTION REQUIRED OF THE CONFERENCE

31. The Conference may wish to take note of the present document and provide guidance for follow-up action.

Distr.
GENERAL

GC.6/27
2 October 1995

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Sixth session
Vienna, 4-8 December 1995
Item 9 (d) of the provisional agenda

INDUSTRIAL DEVELOPMENT AND COOPERATION ACTIVITIES: EQUITABLE DEVELOPMENT THROUGH INDUSTRIAL DEVELOPMENT

Small and medium enterprises

Report by the Director-General

Summary

Updates information provided in document GC.6/5 and describes the role of UNIDO as regards enhancing the role and contribution of SMEs to the industrial development process.

CONTENTS

		Paragraphs	*Page*
Introduction		1 - 5	1
Chapter			
I.	GOVERNMENT POLICY	6 - 12	2
II.	SUPPORT SYSTEMS AND INSTITUTIONS	13 - 16	3
III.	NETWORKING OF SMES	17 - 21	4
IV.	ENTERPRISE UPGRADING	22 - 30	5
V.	CONTRIBUTION OF SMES TO RURAL DEVELOPMENT	31 - 38	6
VI.	ACTION REQUIRED OF THE CONFERENCE	39	7

V.95 57745 (E) (b:\1995\pmo.14)

Distr.: 19 October 1995

Introduction

1. The General Conference, in resolution GC.5/Res.5, requested the Director-General to present to the Conference, at its sixth session through the Industrial Development Board, a report on the implementation of the UNIDO programme on small- and medium-scale industries. The initial report presented to the Board (GC.6/5-IDB.13/12, chap. IV) provided information on progress made on the implementation of the programme up to mid-1994 and on the areas of concentration. Subsequently, in the proposals of the Director-General for a strengthened focus of UNIDO programmes (IDB.14/13), development of small and medium enterprises (SMEs) was identified as one of the seven programmatic themes proposed for the 1996-1997 biennium. Four components through which that theme would be addressed were specified. The present document is an updated report on activities carried out under the programme subsequent to the issuance of document GC.6/5. It should, however, be read in conjunction with relevant portions of document IDB.14/13 (paras. 80-92), which constitutes the background for the ongoing, gradual prioritization and consolidation process of the SME programme.

2. In the present global context, SMEs often are credited with technological innovation and advances, higher competitiveness, and faster response to market conditions. The distinction between large and small firms is, however, breaking down, as large firms increasingly restructure themselves into smaller and decentralized units of production which collaborate with buyers and external suppliers. In most developing countries, however, SMEs cannot fully develop and mobilize, on their own, the information, technological and managerial know-how and financial resources required to operate competitively and efficiently and thus be able to use their full potential and contribute optimally to overall industrial and economic growth. Their development process is often constrained by an overall unfavourable policy environment, inadequate institutional support and the absence of an enabling government policy that supports innovation, facilitates access to financial and technological resources and to markets, and promotes inter-firm competition and cooperation. Moreover, SMEs often lack linkages with business partners and access to markets.

3. During the current biennium, the UNIDO SME programme was developed to address the following issues:

(a) Government policy;
(b) SME support systems and institutions;
(c) Networking of SMEs;
(d) Enterprise upgrading.

4. These issues are continuously reviewed to ensure delivery of the most relevant and effective services. For this purpose, the SME programme has established an observatory and research network that includes an advisory group and a world-wide network of experts and institutions from developing and industrialized countries. The exchange of information and action-oriented research provides UNIDO with state-of-the-art information on SME sector development trends and on the effectiveness of support mechanisms and government intervention methods, thereby providing a basis for refining the scope and enhancing the efficiency and impact of the programme.

5. The underlying principle of the focused SME programme is to contribute to improving the policy and institutional environment in which SMEs operate. Major attention is given to policy advisory services aimed at building up national capabilities in respective countries. The approach is to integrate advice, training and research. In 1994 and 1995, cross-organizational SME programmes were formulated to respond to the identified demand for integrated, multidisciplinary services and to draw on the range of specialized expertise of the Organization. These programmes followed a bottom-up approach and involved the recipients in the design and implementation of programmes and projects. In addition, cooperation and coordination with related bi- and multilateral donor programmes were pursued, through networking with institutions and experts specializing in SME development to ensure complementarity and avoid overlaps. Technical cooperation in the area of SME support systems and institutions was guided by the following principles aimed at ensuring sustainability: promotion of decentralized support services and networking among SMEs; promotion of equitable access to support services, taking also into consideration regional imbalances and gender issues; introduction of commercial orientation in the provision of support services.

I. GOVERNMENT POLICY

6. The main thrust of this programme component is to strengthen national capabilities to establish and maintain a policy and institutional environment for promoting the SME sector and its contribution to industrial growth, modernization and competitiveness. Particular emphasis is on promoting cooperation between government, industry associations, and private and public support institutions.

7. During the biennium, the services rendered by UNIDO involved:

(a) Assisting Governments to formulate and manage national strategies and programmes to promote

the development of the SME sector, in cooperation with industry associations, and private and public support institutions. The basic aim is the integration of SMEs and relevant policies into national industrial and economic development strategies and policies. Assistance was provided to develop SME policies that are interrelated, focused and targeted towards enhancing the overall efficiency of the economy;

(b) Strengthening national capabilities to collect and analyse SME sector-related information, since sector baseline data are crucial for policy and strategy formulation; such baseline information also includes data for analysis of such concerns as gender issues;

(c) Assisting Governments and their national institutional partners to develop mechanisms to ensure effective implementation and continued fine-tuning of strategies and policies, including effective cooperation between institutions and regular interaction of industry associations and support institutions with Government on policy and regulatory measures;

(d) Contributing to improving the policy and regulatory environment in which SMEs operate. For example, UNIDO has a leading role in advising Governments and their institutional partners in policies affecting innovation, access to technological information, industrial technology transfer and development and promotion of inter-enterprise linkages and partnerships;

(e) Assisting Governments with institutional policy, i.e. to develop new or amended legislation, regulations and incentives to promote a network of appropriate demand-driven institutions and support mechanisms.

8. An example of such services can be seen in Romania, where policy advice provided by a UNIDO project led to the creation of the Centre for Promotion of Small and Medium Private Enterprises. Drawing from the successful experience of supporting SME development in Romania, a new project was developed and initiated in 1995 to provide umbrella support to three countries (Albania, Kazakhstan and Republic of Moldova) in the establishment of sustainable organizations and systems for the promotion of private sector SMEs, following the approach of the Romanian project. The immediate objective is to provide a framework for three national programmes that will support a favourable and predictable environment for SME development in the selected countries.

9. Policy research on SMEs is currently being carried out in Central European countries with the objective of providing a comparative analysis of strategies, policies and programmes as a basis for complementary and collaborative development initiatives. The research will not only provide a framework for the design of collaborative projects in the future, but also help to identify policy and programme elements (both good and bad practices) in the respective countries and provide UNIDO and donors with guidelines for fine-tuning their support efforts.

10. Another example of UNIDO support to SMEs is the preparatory assistance carried out in Viet Nam. Following a participatory approach, including the organization of an objectives-oriented project planning workshop, the assistance resulted in the outline of a national SME strategy. Based on the priority areas outlined by the workshop, a major UNIDO support project funded through a German contribution to the Industrial Development Fund was developed. The project aims at institution-building and direct support in the form of advice on streamlining selected legal and regulatory provisions. Similar approaches are being followed in Bolivia (with a focus on women entrepreneurs), Palestine and Swaziland.

11. For most developing countries, SME programmes are being placed in the context of overall private sector development. As such, services for SME development rely on the existence of an enabling environment in which the private sector, and particularly SMEs, can prosper. Linkages are therefore sought between SME activities and overall industrial policies for national and regional development and institutional support programmes. Respective policy advice is aimed at providing a sound framework combined with capacity-building of institutions in support of the private sector, and SMEs in particular. Such integrated services are being provided in the Republic of Moldova, where complementary policy advice is provided on economic, institutional and procedural structures to pave the way for an SME development programme. In Lesotho, the public sector is to be restructured to facilitate the implementation of a SME capacity-building programme.

12. According to the five UNIDO regional studies on the participation of women in manufacturing, one of the major strategies for promoting the participation of women in industry is to create a conducive policy and institutional environment. Therefore, special efforts were made to create awareness and national capabilities to take into account women's concerns in the formulation of SME policies related to overall industrial development on the one hand, and to introduce specific policies and measures to support growth of women entrepreneurs in small-scale industries, on the other.

II. SUPPORT SYSTEMS AND INSTITUTIONS

13. In the past UNIDO was instrumental in the creation of a substantial number of SME support institu-

tions in developing countries, as well as in the strengthening of existing ones. However, many of these mainly public institutions gradually became ineffective as they were often poorly managed, did not have adequate resources and thus failed to have the expected outreach and impact. Lessons learned in the past led to a revised programme approach. Focus is now placed on designing services bottom-up and encouraging concerned institutions (public and private) to work together in a networking manner, stimulating a common language between these institutions and the entrepreneurs and facilitating access to know-how, business partners and resources. The key element is that the institutions are decentralized in their operations and cater to specific target groups within a region or specific subsectors. Special attention is given to the strengthening of private sector representative organizations to assist their SME members.

14. Thus, the main objective of this programme component is to strengthen the access of SMEs to an efficient network of technical and financial services that help them to upgrade continuously their products and process technologies and the skills of their personnel, and to develop efficient linkages with markets and sources of supply.

15. During the biennium, UNIDO has focused on strengthening such institutions as SME development agencies, industry associations, chambers of commerce and industry and human resource and technology development institutions. Support has been designed to enable them to provide better services, on a demand-driven and sustainable basis in marketing, management, industrial information, technology acquisition and development, skills upgrading, quality assurance, finance and other areas. Assistance also included promotion of networking among such institutions. Examples include the comprehensive SME promotion and service programmes carried out in Burkina Faso and Niger (organization of complete support systems) and in Cameroon and Senegal (networking between support institutions and specific groups of enterprises), as well as new activities in Nigeria (organization of decentralized institutions). To support such programmes, special tools to reduce SME investment risk, to monitor enterprises and to train consultants are being developed under the Industrial Development Decade for Africa. In Guinea, the experience of an ongoing integrated SME assistance project (covering financial and technical cooperation to SMEs in the provinces) attracted the interest of the Caisse Française de Developpement. That bank is considering supplementing substantially the revolving fund in the UNDP/UNIDO project.

16. Under the technical support services at the programme level (TSS-1) UNIDO provided inputs to a number of UNDP-led private sector development support programmes, including those in Benin and Equatorial Guinea. Such programmes usually involved cooperation with other United Nations agencies (particularly the International Labour Organization) and donors. Through an ongoing SME support programme, UNIDO is coordinating the formulation of the UNDP Private Sector Development Programme framework in Zaire, with involvement of other United Nations agencies and donors. A guiding theme is promoting the creation of networks of support institutions and services that work together in an efficient and coherent manner with a view to fostering productivity and competitiveness of existing SMEs and to facilitating the creation of new enterprises through, for example, business incubation schemes. An example of the latter schemes are projects under implementation in economies in transition such as Poland and Uzbekistan.

III. NETWORKING OF SMES

17. The networking of SMEs among themselves and with large manufacturing firms through production linkages is an indispensable dimension of industrial resilience and competitiveness. Subcontracting, supply and partnership relations between industries of various types and sizes, especially between large and small enterprises, is therefore a feature of every modern industrial economy. As subcontracting and similar linkages between small and large industries are important for the development of the SME community, UNIDO further expanded activities in this area.

18. The regional programme and network of subcontracting and partnership exchanges in Latin America, comprising 28 exchanges in 13 countries, is being extended to Costa Rica and probably to El Salvador and Honduras. It is also being consolidated through the organization each year of two regional subcontracting fairs — "SUBCONTRATA-Latino Americana" — training seminars, the enhancement of the databases and through the reorganization of the new executive committee of the regional network.

19. The regional Arab network of subcontracting and partnership exchanges has also been consolidated, and its capacity to develop close partnership relations with European enterprises and institutions has been considerably enhanced through the organization of specialized partnership fairs, promotional missions and marketing surveys. Other countries from the region, such as Lebanon and Saudi Arabia, have also expressed interest in joining the network.

20. Subcontracting and partnership exchanges being set up at the national level include Slovakia, with financing by the European Union (EU) PHARE programme. This represents the first UNIDO EU project

contract on the basis of the unique competence and comparative advantage of UNIDO. A feasibility study for the creation of an exchange in Mauritius was undertaken and another is being conducted for the establishment of a pilot exchange in Moscow. In 1995, priority was accorded to the strengthening of the methodology, such as a new version of the UNIDO Industrial Subcontracting System (UNIDOSS) software and preparation of a UNIDO guide on the establishment of subcontracting and partnership exchanges, and to the dissemination of the programme to other regions, including Central and Eastern Europe and Eastern Asia.

21. With regard to networking and cooperation at the subsectoral level, major activities were initiated aimed at organization and development of subsectoral clusters of SMEs. Support was provided to groups operating in the same or complementary industrial subsectors in order to improve specialization and cooperation among SMEs of the cluster, and thus to realize collective efficiencies. Specialization and cooperation mitigate diseconomies of scale and open up efficiency gains through the generation of external economies and joint action. Successful projects in this field are under way in Bolivia, Honduras, Jamaica, Madagascar and Nicaragua and the demand for them is increasing. In Honduras, for instance, where the first project of this kind was initiated in 1993, UNIDO helped to organize some 30 groups of small firms into cooperative networks in subsectors such as clothing, footwear, furniture, woodworking, metal-working, agro-processing and packaging. The programme assisted clusters of enterprises in the assessment of their competitiveness, promoting inter-firm linkages including forward linkages (with buyers of final products) and backward linkages (with input suppliers), establishing common service facilities and self-help service centres, in addition to self-managed joint technical upgrading and collaborative learning mechanisms designed to improve quality, decrease costs and reduce waste.

IV. ENTERPRISE UPGRADING

22. Basic UNIDO technical support to SMEs addresses the enhancement of productivity, quality and competitiveness; restructuring requirements and employment generation; technological absorption and innovation; and energy efficiency and environmental protection in the SME sector.

23. In India, a preparatory project was initiated to discuss issues related to safety promotion in small and medium chemical and allied industries, and to identify and examine urgent problems. This project will ultimately lead to securing safety of industrial workers and environmental integrity on and around the chemical production plants by networking of industries, non-governmental organizations and the Government. Another example is the assistance provided in strengthening the training capabilities of the Central Institute of Plastics Engineering and Technology through a programme for training of trainers. Assistance involved product design, rational use of plastic materials, trouble-shooting, training of SME personnel, increasing market competitiveness and environment protection from pollution by plastic materials through recycling.

24. In several developing countries SMEs processing medicinal and aromatic plants were supported in upgrading their technologies and improving quality to meet international standards for export, as well as to serve local markets. For example, advisory services were provided in Indonesia in setting up a training centre for technical staff of SMEs in-plant based medicinal products and to develop new product packages. Technical support continues for small-scale producers of traditional perfumery preparations in India, through the Product and Process Development Centre set up at Kannauj.

25. In addition to artisanal activities related to stone craft and pottery, a significant part of activities in the building materials sector was specifically focused on support to SMEs, especially in Africa. The emphasis was on supporting entrepreneurs in technology transfer and acquisition, and on training in the effective management of technologies. The assistance gave priority to the training of women to enhance their management role, promoted the introduction of clean and energy-saving technologies and raised local awareness of global market trends and opportunities for export products.

26. Building up capacities in technology acquisition and negotiation through systematic educational activities is also a continuing activity geared toward assisting SMEs in particular. This activity aims to develop the ability to access and effectively utilize knowledge and information to help SME staff in the process of finding, evaluating, acquiring, negotiating and implementing technology transfer projects. Such capacity-building programmes with a very strong SME component and orientation were implemented in 1995 in Brazil and in the African and Arab regions.

27. A technology promotion tool geared specifically to small- and medium-scale industries is the Techmart programme. As a business forum, the six Techmarts held to date have provided project promoters representing primarily SMEs in China, India, Viet Nam, Zimbabwe and in the countries of the Common Market for Eastern and Southern Africa, with opportunities to source, assess and subsequently conclude technology and joint ventures with technology owners and developers from developed and developing countries alike. Additional information on recent and forthcoming Techmarts is provided in paragraphs 4 and 5 of document GC.6/26, which also

describes related activities, that offer promotional support to SMEs including the 1995 InTechmart held at New Delhi, India.

28. To assist SMEs in cultivating a tradition and culture for international competitiveness, UNIDO developed special technology management tools and techniques. For example, a National Workshop on Technology Management for Enterprises was conducted at Nairobi, with the objective of sensitizing and assisting selected Kenyan SMEs in the introduction of such techniques. As a follow-up, further technology innovation projects are envisaged. A manual for self-diagnosis of critical technological needs for sustained competitiveness of SMEs is under preparation. The manual will provide a methodology for the assessment of SME technological position and future opportunities.

29. Large-scale training programmes for women entrepreneurs in the food-processing sector are currently under implementation in Botswana, Gambia, United Republic of Tanzania, Viet Nam and seven countries in Central America. The aim is to introduce the managerial skills and technical knowledge required for the establishment and operation of small-scale units/enterprises. Entrepreneurial awareness, basic business and management skills, combined with technology choice and technical aspects of production are among the main subjects covered.

30. In cooperation with the All China Women's Federation, UNIDO has launched a programme to develop a model training package in management training of women township entrepreneurs. Based on a needs assessment conducted with women entrepreneurs from Beijing, as well as from the provinces of Hebei, Shandong and Jiangsu, a training-of-trainers workshop on conducting management training according to the new package was held in 1994 at Beijing and Singapore for 30 Chinese participants. The programme is envisaged for replication throughout China, after being modified according to the specific needs of township enterprises in the respective regions.

V. CONTRIBUTION OF SMES TO RURAL DEVELOPMENT

31. Under this UNIDO programme, the goal is productive employment and income generation in rural areas. UNIDO has been instrumental in: (a) the creation of competitive non-farm entrepreneurial and employment opportunities through the promotion of rural small-scale industries as alternative and supplemental economic activities on the basis of local resources and markets; and (b) increasing the income of small-scale farmers by: (i) increasing demand for their produce as inputs to industrial processing; and (ii) enhancing their agricultural productivity through the provision of improved industrial inputs such as tools, equipment and chemicals. By enhancing forward and backward linkages between agriculture and SMEs in rural areas and townships as well as through final demand linkages, the programme contributes to raising the income of rural population, particularly of small-scale farmers, fishermen and rural small industrial entrepreneurs and workers.

32. In 1994 and 1995, more than 80 technical co-operation activities have been carried out that are broadly considered to contribute to rural development. Almost half of those were carried out in least developed countries. In addition, UNIDO convened annual meetings of the inter-agency Working Group on Industrial Contribution to Rural Development of the Administrative Committee on Coordination Sub-Committee on Rural Development. In 1995, experiences of the United Nations agencies on 14 different schemes and programmes to promote rural industries were reviewed. A study on intersectoral linkages and their impact on rural poverty alleviation was issued.

33. Rural SMEs often lack access to market, technical and financial information and services that are more easily available in urban areas. In order to improve the strength of rural SMEs under increasingly competitive markets, the programme emphasized the strengthening of technical capabilities of institutions in rural areas and of promoting networking among themselves to improve accessibility of rural entrepreneurs to such services as business planning advice, preparation of loan proposals, dissemination of information or referral services on equipment sourcing and other critical inputs, and the organization of training programmes. This type of project has proven successful in Kenya, Micronesia, the Solomon Islands and Zambia. In the state of Pohnpei in Micronesia, the Pohnpei Entrepreneur Development Centre was created, which organizes existing service facilities. In this process, about 50 businesses have begun or expanded and some 300 new jobs have been created in the rural area. Similar projects have started up in Lesotho and Mozambique. Revolving fund facilities for rural entrepreneurs were proven useful in rural Guinea and Zambia, where no access to other sources of finance existed. UNIDO also introduced projects to strengthen clusters of SME subsectors in rural areas of Bolivia, Honduras and Nicaragua.

34. Projects aiming at human resource development were implemented for rural women and entrepreneurs. The training programme referred in paragraph 30 above enabled 40 trainers to conduct training programmes now ongoing in rural areas of China designed to improve the competitiveness of women entrepreneurs. Another training programme benefiting women in rural areas, particularly in the United Republic of Tanzania and in Viet Nam, is the large-scale programme for women

entrepreneurs in the food-processing sector (para. 29 above). In Guinea and Mali artisans were trained to improve quality and design of hand-crafted textiles. Together with the United Nations Population Fund, activities continued in rural Sudan to improve the condition and status of women through productive skill development and training in health management. Drawing on its experience, UNIDO has started to prepare a village industry development package that incorporates issues related to rural life style.

35. The SME sector contributes to increased incomes of rural areas through industrial utilization of resources such as vegetables, fruits, plants, animal derivatives, mineral and wood. For example, rural women in Burkina Faso and Mali have benefited from the development of affordable and user-friendly food-processing equipment that uses inexpensive energy sources. Technology for quality improvement in traditional fish processing has been introduced in Morocco, Pakistan, Senegal and Togo. Industrial processing of medicinal and aromatic plants has continuously been promoted. In eight African countries, improvement schemes directed at hides and skins elevated agro-based indigenous, renewable raw material sources to a higher value added stage. Traditional pottery-making in Bolivia was revitalized by improving production technology, working procedures, selection and treatment of raw materials and product designs. In the predominantly rural Nghe An Province of Viet Nam, an improved technology was introduced to add value to marble resources. Furniture making was promoted to revitalize the wood-working sector in the state of Campeche in Mexico, and small-scale entrepreneurs received training in the local production of construction materials in rural areas of Bhutan, Cameroon, Guatemala and Madagascar.

36. SMEs produce and provide repair and maintenance services for tools and equipment that are crucial inputs to productivity in agriculture. For example, during the reporting period, regional projects continued in Asia to improve agro-related metalworking industries, while in Africa, a regional pilot programme was introduced to manufacture and test hydraulic maintenance presses and hammer mills. In Uganda an existing agricultural implements factory that produces ox-carts and hammer mills was rehabilitated. Prototype mobile seed dressing applicators tailored to the needs of African farmers were developed. In Asia and the Pacific water-based and biobotanical pesticides, which are safer than traditional chemicals, were promoted in the framework of the UNDP FARM (farmer-centred agricultural resource management) programme.

37. Other activities during the biennium related to SMEs' contribution to rural development included energy conservation and improved transport facilities in rural areas. For example, activities to promote energy efficiency in township and village enterprises were initiated in China and new and renewable sources of energy are being promoted in the Democratic People's Republic of Korea. Low-cost rural transport devices were introduced to small workshops in Zimbabwe.

38. The contribution of SMEs to rural development is extensive — from creating non-farm employment and income generation to releasing women from time consuming, strenuous activities, and increasing the revenue of small-scale farmers by enhancing their forward and backward linkages with SMEs. The UNIDO programme to enhance the contribution of SMEs to rural development offers impact-oriented, effective services by applying multi-sectoral expertise available at UNIDO to the specific conditions of each country.

VI. ACTION REQUIRED OF THE CONFERENCE

39. The Conference may wish to take note of the information contained in the present document.

Distr.
GENERAL

GC.6/28
19 October 1995

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Sixth session
Vienna, 4-8 December 1995
Item 9 (e) of the provisional agenda

INDUSTRIAL DEVELOPMENT AND COOPERATION ACTIVITIES: ENVIRONMENTALLY SUSTAINABLE INDUSTRIAL DEVELOPMENT

Report by the Director-General

Summary

In response to specific requests of policy-making organs, updates previous progress reports, identifies policy issues and describes in detail the scope of work under the thematic priority "environment and energy".

CONTENTS

		Paragraphs	*Page*
Introduction		1 - 6	2
Chapter			
I.	IMPLEMENTING AGENDA 21 AT INTERNATIONAL AND NATIONAL LEVELS	7 - 14	3
II.	TRANSFER OF TECHNOLOGY FOR CLEANER AND SAFER INDUSTRIAL PRODUCTION	15 - 18	4
III.	IMPLEMENTATION OF INTERNATIONAL CONVENTIONS, PROTOCOLS AND AGREEMENTS	19 - 41	5
IV.	INDUSTRY AND INTERNATIONAL ENVIRONMENTAL NORMS AND STANDARDS	42 - 47	8
V.	ACTION REQUIRED OF THE CONFERENCE	48	9
Notes			10

V.95 58071 (E) (b:\1995\pmo.16)

Distr.: 30 October 1995

Introduction

1. The General Conference in its resolution GC.5/Res.6 requested the Director-General to take into consideration in implementing the UNIDO environment programme the need: to enhance the transfer of cleaner production technologies and techniques to developing countries under most favoured nations arrangements; to promote the capacity of developing countries to develop and produce such technologies and techniques; to promote technical cooperation among developing countries in environment-related matters; to further enhance in-house analytical capacity in the field of environment and energy; to disseminate information on environmental risks associated with industrial processes and technology, and measures for protection against such risks; and to take appropriate measures to comply with all relevant recommendations of Agenda 21 and seek a leading role for UNIDO in their implementation. The Conference also requested the Director-General to take into account in implementing UNIDO energy activities the need of developing countries to utilize better their own energy resources in order to increase their industrial production; to develop their capacity to produce energy-related technologies for industrial development, and to focus on the provision of energy for rural industries. The Director-General was requested to present through the Board to the General Conference at its sixth session a report on the implementation of the resolution.

2. The report of the Director-General (GC.6/5-IDB.13/12, chap. V) was presented to the Industrial Development Board at its thirteenth session. As one of the five development objectives of UNIDO, environmentally sustainable industrial development is also covered in one of the sections of chapter II of the *Annual Report of UNIDO 1994*, which reviews the activities of the Organization that primarily address that development objective.

3. At its thirteenth session, the Board in decision IDB.13/Dec.7 requested the Director General, in implementing the UNIDO environment and energy programme to continue efforts:

(a) To utilize resources available under the Global Environment Facility and Capacity 21;

(b) To increase UNIDO involvement in projects supporting the implementation of international environmental protocols, treaties and conventions;

(c) To enhance the transfer of clean technologies for building developing countries' capacities in absorbing cleaner technologies and minimizing wastes;

(d) To improve the capabilities of developing countries to collect and disseminate industrial environment and energy information.

The Director-General was also requested to report on developments in that respect to the sixth session of the General Conference.

4. Subsequently, at its fourteenth session, the Board in its decision IDB.14/Dec.2 took note of the proposals of the Director-General for improving UNIDO programmes through a strengthened focus as contained in document IDB.14/13 and, *inter alia*, requested the Director-General to submit to the sixth session of the General Conference proposals on the seven programmatic themes and focusing UNIDO activities for the 1996-1997 biennium.

5. Against this evolution in policy directives, the General Conference will have before it at least four documents in which the environment and energy-related programmes and activities undertaken in the current and the forthcoming bienniums of the Organization are described.

(a) Draft medium-term plan, 1996-2001, chapter II.B.4, pp. 13-14 (IDB.13/10);

(b) Progress report for 1994 on specific UNIDO activities (GC.6/5, chap.V);

(c) *Annual Report of UNIDO 1994* (IDB.14/10, chap. II.A.1 and II.A.4);

(d) Improving UNIDO programmes through a strengthened focus (IDB.14/13, chap. IV.B, paras. 51-79).

The documents depict UNIDO environment and energy-related activities at varying levels and degrees of detail. Documents IDB.13/10 and IDB.14/13 deal with strategic and programmatic issues while the other two deal with operational activities undertaken by UNIDO.

6. Rather than merely updating the information contained in the above-mentioned documentation, the present document:

(a) Provides information on activities undertaken in 1995 and indicates future lines of action in response to Board decisions IDB.13/Dec.7 and IDB.14/Dec.13;

(b) Describes in greater detail the scope of UNIDO work under the thematic priority "environment and energy";

(c) Identifies policy issues requiring discussion and decision by the General Conference.

I. IMPLEMENTING AGENDA 21 AT INTERNATIONAL AND NATIONAL LEVELS

7. At the international level, during the 1994-1995 biennium, the Organization was engaged in the review process for the implementation of Agenda 21. This entailed participation not only in the preparations for, and deliberations of, the second and third sessions of the Commission on Sustainable Development (CSD) but also in United Nations system-wide coordinative mechanisms supporting CSD. Participation in the review process for Agenda 21 enabled UNIDO to define its role in relation to specific aspects of the implementation of Agenda 21 and to establish a basis for joint action with other agencies in initiatives where industry-related issues played a major role in realizing the objectives of Agenda 21.

8. Developments in 1994 were reported on in document GC.6/5, paragraphs 143-150. During 1995, the Organization concentrated on two issues. The first was chapter 16 of Agenda 21, "Environmentally sound management of biotechnology". On this subject, UNIDO was designated the system-wide Task Manager and prepared the report by the United Nations Secretary-General to the third session of CSD (11-28 April 1995). The second area was chapter 34 of Agenda 21, "Transfer of environmentally sound technology, cooperation and capacity building". For that chapter, in cooperation with the United Nations Department for Policy Coordination and Sustainable Development (UNDPCSD) and the United Nations Environment Programme (UNEP), UNIDO convened a round table on technology transfer, cooperation and capacity-building for sustainable development in Vienna, from 6 to 8 February 1995. The proceedings of that round table provided a major input to the report by the Secretary-General on chapter 34 of Agenda 21, and to the formulation of a work programme adopted by CSD at its third session.

9. During 1996, the Organization will work along three lines:

(a) Following up on the conclusions of the third session of CSD on chapter 16 of Agenda 21 by convening a round table on the safe management of biotechnology. That round table will involve international organizations, industry and non-governmental organizations (NGOs) in assessing the initiatives already taken, additional policy initiatives needed, gaps, capacity-building and information support required to enable developing countries to manage applications of biotechnology in an environmentally sound manner;

(b) Following up on chapter 34 of Agenda 21 by developing interagency initiatives on capacity-building for the transfer of environmentally sound technologies. In the first instance, such initiatives would utilize the UNIDO network of national cleaner production centres (NCPCs) as the foundation for developing the capacities, in client countries, to absorb and disseminate information on environment and energy-related technologies, and to diversify into such areas as chemical safety and worker health;

(c) Preparing for the fourth session of CSD through major contributions to the Committee's review of the issues arising from chapter 34, Transfer of environmentally sound technologies, cooperation and capacity-building; chapter 9, Protection of the atmosphere; the issue of trade environment and sustainable development under chapter 2, International cooperation to accelerate sustainable development in developing countries and related domestic policies; and chapter 3, Combating poverty. UNIDO will also be involved in the Intergovernmental Panel on Forests, established by CSD at its third session (see para. 40 below).

10. At the national level, UNIDO supports the implementation of national sustainable development strategies in several ways. First, it helps countries to define operational initiatives to realize the industry-related components of already-formulated national Agendas 21. The most advanced case is China, where UNIDO worked with the Government in formulating 16 projects in support of the implementation of the national Agenda 21.[1] The projects developed are in the areas of capacity-building for sustainable development, cleaner production and environmental protection, clean energy and transportation, and pollution control. Those projects, worth over $25 million, have been finalized and are being submitted to various bilateral and multilateral sources of funding.

11. A second approach to the implementation of national Agendas 21 is the UNIDO support to the formulation and implementation of strategies for ESID. As previously reported,[2] UNIDO has been engaged in this effort in Madagascar, Morocco, Mozambique and Nepal. ESID strategies are designed to build capacities in client countries that would enable Governments, industry and sections of civil society to establish environmental goals and action plans, develop policy instruments to support the goals of those plans, and to devise appropriate monitoring and enforcement measures to realize those goals. Through the above approaches, UNIDO aims to support developing countries in integrating environmental considerations into industrial activity and policies.

12. These national-level actions are coordinated, wherever appropriate, with the endeavours of

Capacity 21 of the United Nations Development Programme (UNDP), either by drawing upon the conclusions of Capacity 21 programmes or by contributing to them. UNIDO is not, however, executing Capacity 21 programmes, since that financial facility and the programmes funded by it are managed by UNDP under national execution arrangements.

13. UNIDO support to sustainable development strategies is not, however, limited to overall national plans. An innovative approach, called the Area-Wide Environmental Quality Management (AEQM) Plan, attempts to build capacities and define ESID strategies at the levels of regions, municipalities or districts. The objective of the AEQM plan is to analyse the specific impact of productive activity on all environmental systems in a given geographical space, to assess the assimilative capacity of those systems, and based on these two technical assessments, to establish a set of environmental priorities and action plans to improve environment quality and reduce the adverse environmental impact on air, water and land resources. The action plans so drawn up specify the roles of municipal Governments, industry and members of civil society in realizing the environment goals established. At present, UNIDO supports AEQM planning at Dhanbad, India, and in the Bilecik region of Turkey. Depending on the results achieved in implementing the plan, this initiative could form a valuable operational component of national sustainable development strategies.

14. In all the national level actions, UNIDO follows two principles. First, there is a high degree of involvement of Governments, industry and NGOs, to ensure national "ownership" of ESID strategies. Second, building of national capacities is a major component of these programmes.

II. TRANSFER OF TECHNOLOGY FOR CLEANER AND SAFER INDUSTRIAL PRODUCTION

15. At the sector-wide level, the UNIDO/UNEP network of national cleaner production centres (NCPCs) has been reported extensively in other documentation.[3] During 1995, eight NCPCs centres were set up as follows:

Africa: United Republic of Tanzania, Zimbabwe
Asia: China, India
Latin America: Brazil, Mexico
Europe and Newly Independent States of the former Soviet Union: Czech Republic, Slovakia

This network of eight centres has drawn funding of $4.6 million to be disbursed over three years. In one instance, a centre was created through a self-financing arrangement by the host Government. The demand for NCPCs is increasing. During 1994 and 1995, thirteen requests for such centres were received or were under active discussion, as follows:

Africa: Mauritius, Nigeria, South Africa, Tunisia
Asia: Indonesia, Philippines, Thailand
Latin America: Argentina, Ecuador, Peru, Uruguay and a subregional centre for Central America
Europe and Newly Independent States of the former Soviet Union: Hungary, Slovenia

The demand for the NCPC programme, which is a cornerstone of UNIDO's efforts, is constrained only by the resources available to it. It is hoped that, during the course of the 1996-1997 biennium, extrabudgetary contributions will be pledged to achieve the full complement of 20 centres envisaged for this stage of the programme.

16. To widen its profile on the subject of cleaner production, UNIDO is convening an NGO Forum on Cleaner Industrial Production, to be held prior to the sixth session of the General Conference. The Forum will involve business and professional associations, environmental NGOs and others in a two-day discussion designed to raise awareness of the possibilities for, and constraints upon, efforts to achieve cleaner industrial production. The results of the NGO Forum will be submitted to the General Conference. It is anticipated that UNIDO will be able to form partnerships with the NGO community in widening its cleaner production programme.

17. UNIDO sectoral support to the transfer of cleaner technology covers, in particular, the following industries: leather and leather products; agro industries; wood products; textiles; chemicals, pharmaceuticals and biotechnology; pulp and paper; metallurgy; engineering and machine tools. Such support comprises sector-specific projects or programmes at national or regional levels that emphasize resource efficiency (chemicals, water, energy and raw materials), pollution prevention, waste recovery and recycling measures as a primary objective, with effluent/pollutant treatment as an adjunct measure[4].

18. During 1995, UNIDO became a full-fledged member of the Inter-Organization Programme on Sound Management of Chemicals (IOMC). The participating agencies in IOMC (World Heath Organization, UNEP, International Labour Organization, UNIDO, Food and Agriculture Organization of the United Nations and Organisation for Economic Cooperation and Development) provide technical support to the Intergovernmental Forum on Chemical Safety, which has been created under the policy framework of chapter 19 of Agenda 21, Environmentally sound management of toxic chemicals. The Forum is hosted by the Government of Sweden and has 114 participant Member

States. The UNIDO area of concentration in this programme is the development of risk reduction programmes in the manufacture and utilization of toxic chemicals. At present, UNIDO is implementing risk reduction projects worth $5.8 million in various sectors of producing and consuming industries, and another $3.1 million worth of projects are in the pipeline, for which funding is being sought.

III. IMPLEMENTATION OF INTERNATIONAL CONVENTIONS, PROTOCOLS AND AGREEMENTS[5]

19. Several environment-related protocols, conventions and agreements have been concluded by the international community over the last 15 years. As with Agenda 21, the implementation of these internationally agreed instruments forms a policy platform for development of specific activities by UNIDO. In recognition of this fact, the Conference on Ecologically Sustainable Industrial Development (Copenhagen, Denmark, 14-18 October 1991) specifically requested UNIDO to assist developing countries in the implementation of environmental conventions and protocols related to industry.[6] Having analysed the various instruments and policy initiatives, the Organization has established priorities among them, as follows:

(a) Montreal Protocol on Substances that Deplete the Ozone Layer;

(b) United Nations Framework Convention on Climate Change;

(c) Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;

(d) Convention on Biological Diversity;

(e) The Statement of Principles on Forests adopted by the United Nations Conference on Environment and Development (UNCED);

(f) Global freshwater assessment.

The present chapter defines the areas of support offered by UNIDO in the implementation of these instruments.

A. Montreal Protocol

20. UNIDO is by now well established as an implementing agency of the Multilateral Fund for the Implementation of the Montreal Protocol. UNIDO supports the choice and transfer of technology for the phasing out of ozone-depleting substance (ODS) production and consumption in the refrigeration, foams, halons, aerosols and solvent sectors. From 1992, when it became an implementing agency, to the current year, UNIDO has or is implementing 21 investment projects in 10 countries. The total value of these projects is $45.5 million. In addition, 40 preparatory assistance projects, worth $4.0 million, are being implemented in 26 countries. A further 31 investment projects in 19 countries are in the pipeline, as are 26 preparatory assistance projects in 21 countries. The total value of UNIDO pipeline projects under this source of funds is $108.1 million.

21. While UNIDO is now able to authoritatively define and transfer the most cost-effective technologies for phasing out ODSs, the challenge remains for the Organization to devise ODS phase-out strategies for small-scale industries and for low ODS consuming countries. It is anticipated that the Organization will be able to develop, test and implement those strategies in the 1996-1997 biennium.

B. Framework Convention on Climate Change

22. The United Nations Framework Convention on Climate Change (UNFCCC), although a non-binding treaty, has identified the imperative for "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system".[7]

23. In developing countries, industry's share of energy consumption ranges from 27 per cent in Africa and 38 per cent in Latin America and the Caribbean to 49 per cent in Asia and the Pacific. A small number of raw materials-processing industries account for most of this consumption, including iron and steel, non-ferrous metals, chemicals, non-metallic mineral products, textiles and pulp and paper. These sectors are also responsible for a large proportion of industry's share of greenhouse gas emissions and other pollution. Energy consumption is continuing to rise in developing countries, since their improvements in energy efficiency, although considerable, have not kept pace with rising manufacturing output. In addition to industrial growth, there has been structural change in the manufacturing sector away from traditional, labour-intensive light manufacturing to more energy-intensive production and processing of raw materials. Urban growth, electrification, and the development of basic infrastructure all raise energy intensity during industrialization.

24. Through UNFCCC developing nations, like all other countries, are being requested by the world community to contribute to the common goal of reducing greenhouse gas emissions. However, they may have less incentive and less means to do so and will therefore require international assistance.

25. Developing countries need access to the best energy-efficient technologies available on the world market which are relevant to their natural resource endowments and their industrial requirements and are cost effective. Developing nations must be assisted in building up an energy-efficient capital stock by accelerating the deployment of low energy intensity processes and equipment, and strengthening national capabilities for energy efficient design and manufacturing.

26. The energy-related activities of UNIDO constitute a direct response to developing countries' efforts to implement this Convention. In 1995 and the forthcoming biennium, UNIDO will use its analytical capacity and its technical expertise:

(a) To help developing countries and countries with economies in transition prepare national "communications" on their greenhouse gas emissions;

(b) To analyse the impact of climate change response measures on the economic and industrial development of developing countries, with the view to identifying economically viable technology options for reducing greenhouse gas emissions from the production and consumption of energy;

(c) To support technology transfer for improvement in the efficiency of fossil fuel-based power generation, with concomitant improvements in environmental performance;

(d) To promote technology transfer for the use of renewable sources of energy;

(e) To develop and implement technology transfer for energy efficiency programmes in industry, in complementarity with cleaner production/pollution prevention measures.

27. Regarding (a) above, signatory countries to UNFCCC are required to provide inventories of greenhouse gas emissions in the energy and industrial sectors. UNIDO will help developing countries and countries with economies in transition to apply the relevant guidelines and prepare the required inventories. It could also assist the UNFCCC secretariat in the technical review of national communications, starting with those received from countries with economies in transition.

28. On (b), in response to its intervention before the First Conference of the Parties to the United Nations Framework Convention on Climate Change (Berlin, 28 March - 7 April 1995), UNIDO was requested by the Chairman of the New York Chapter of the Group of 77 to undertake a study on the impact of climate change mitigation measures on the economic and industrial development of developing countries. This study has been initiated in 1995 and will be concluded in the course of the next biennium. The objective of the study is to identify economically viable options for reducing the rate of growth of greenhouse gas emissions from developing countries without increased impacts on the growth of their industrial activities, but aiming at an improvement of the health and quality of life of the population. Measures to be identified and evaluated in the study will focus on improved industrial energy end-use efficiency, and fuel switching. These activities offer opportunities for significant reductions in greenhouse emissions and are relevant to the technical cooperation programmes of UNIDO.

29. The study will prioritize technology options for developing countries with respect to emissions reductions, energy savings, additional environmental benefits and costs. It will evaluate the impact on industrial and socio-economic development of accelerated introduction of low energy intensity industrial technologies. It will identify the impacts of deploying new and energy-efficient versions of widely used industrial processes and equipment and evaluate the potential for direct energy savings by reducing energy use per unit of physical output.

30. Point (c) above will be addressed by such operational initiatives as the UNIDO clean coal technology programme and the promotion of fossil fuel-based technologies that maximize conversion efficiency and heat recovery in power generation.

31. In its support of (d), the development of alternate sources of energy, UNIDO has already initiated a programme on biomass energy for industrial development in Africa. At this point, the programme is being initiated in Kenya, Uganda and the United Republic of Tanzania. During the first phase of the programme, the potential and actual uses of biomass will be analysed in each participating country, including the inefficiencies in current utilization of biomass energy. It is anticipated that the main phase of the programme will build national capacities to develop biomass resources and to promote their efficient utilization. A similar programme is being developed for the Asia and Pacific region. The launching of these regional biomass energy programmes will be supported by an International Conference on Biomass Energy, which UNIDO will hold in December 1995. In addition, UNIDO will maintain its promotional role in renewable energy resources by providing policy advice and technical support to countries through, in particular, the Centre for Applied Solar Energy located at Perth, Australia.

32. As regards (e), industrial energy efficiency, UNIDO introduces energy auditing and optimization as an important component of its sectoral and cross-sectoral

programmes on cleaner production. More recently, however, there has been a demand for stand-alone projects in this field. An effort in China funded by the Global Environment Facility (GEF), for example, will require UNIDO to develop a programme to select, demonstrate and propagate energy efficiency technologies in selected industrial branches within the town and village enterprises sector in that country.

33. Much of UNIDO's energy-related work, which is increasing in importance, will thus need to focus on GEF, which awards first priority to climate change. At present, UNIDO acts as an executing agency for GEF projects on behalf of UNDP. The role of UNIDO in this field could, no doubt, be further enhanced.

C. Basel Convention

34. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal has a close bearing on UNIDO work on chemical safety. While the Convention does not have a financial facility associated with it, its secretariat has initiated a programme whereby it will soon set up regional centres for training and technology transfer for the safe handling and disposal of hazardous wastes. The secretariat of the Basel Convention has accepted a UNIDO proposal to closely link the UNIDO/UNEP NCPCs in each region to the respective regional centre set up under the Basel Convention. Those centres could be utilized as training facilities for NCPC staff and as a support resource for national capacity-building initiated by each UNIDO/UNEP NCPC, in respect of the safe use of chemicals in industrial processes.

D. Convention on Biodiversity

35. As already mentioned above, the follow-up of chapter 16 of Agenda 21, Environmentally sound management of biotechnology, was reviewed at the third session of CSD. UNIDO, as United Nations system-wide Task Manager on chapter 16, prepared the report by the Secretary-General on this subject. The discussions at CSD, at both intergovernmental and non-governmental levels, revealed a profound concern on biosafety issues arising from the release of genetically modified organisms. CSD specifically requested the secretariat of the Commission on Biodiversity to examine the question of biosafety arising from the release of genetically modified plant species. On its part, UNIDO has recognized the importance of the issue as testified by its work, together with FAO and WHO, on voluntary guidelines for biosafety, and more recently through the development of the Biosafety Information Network and Advisory Service (BINAS).

36. Given the concerns of CSD, the role of UNIDO as Task Manager for biotechnology, and the need to establish a scientific and technical appraisal of issues, UNIDO proposed to UNDPCSD that it host a round table on the safe management of biotechnology, as a follow-up to the discussions of CSD. The round table would have as wide a scope as possible in order to provide an overview of issues and identify the actions required from national and international bodies dealing with biotechnology. For this reason, the round table would deal with the safe management of biotechnology rather than with biosafety alone. The safe management of biotechnology would encompass safety practices in research and development, testing and open release stages of the development of products through the use of biotechnology. Furthermore, the issue of safety practices would have to be reviewed within the context of specific sectoral applications of biotechnology, i.e. the pharmaceutical industry, the agricultural sector and the environment industry. In each of these development stages and sectoral applications, there is a need to look at trends in application of biotechnology, regulations governing each stage in development, institutional and scientific capacities required to assess risk, and information support. It is anticipated that the round table will help to define a set of core activities in technical and scientific capacity building, information support and technology trends assessment, which could enable the United Nations system to identify needs and gaps and further initiatives required in responding to prevailing environmental concerns.

E. UNCED Statement of Principles on Forests

37. The Forest Principles adopted by the United Nations Conference on Environment and Development (UNCED), constituted a non-legally binding agreement. At the third session of CSD, in order to enhance action to apply these principles, it was decided to establish an open-ended *ad hoc* intergovernmental panel on forests, under the aegis of CSD. That panel is required to initiate its work in 1995, to report its progress to the fourth session of CSD in 1996 and to present its final conclusions to the fifth session of CSD in 1997. The issues to be examined by the panel are:

(a) Implementation of UNCED decisions related to forests at the national and international levels, including the examination of sectoral and cross-sectoral linkages;

(b) International cooperation and financial assistance in technology transfer;

(c) Scientific research, forest assessment and development of criteria and indicators for sustainable forest management;

(d) Trade and environment issues relating to forest products and services;

(e) The role of international organizations and multilateral institutions and instruments.

38. UNIDO intends to support the analytical work conducted by the United Nations system in support of the intergovernmental panel, particularly focusing on issue (b), i.e. the transfer of technology for the sustainable use of timber and non-timber forest products. The emphasis is on enhancing the proactive role of forest-based industries (pulp and paper, wood processing, building materials, biomass energy, and non-wood forest products) in sustainable forest management. UNIDO work on forest-based industrial development would encompass: increasing value added from secondary processing of forest products, promoting small-scale forest-based enterprises that support rural development and local entrepreneurship, and creating funds for management and conservation of forest resources. The major role of UNIDO would be in the transfer and development of environmentally sound technologies, effective resource management, and promotion of certification and testing facilities to enable adherence to emerging environmental norms. In addition, UNIDO would use its participation in the deliberations of the panel to develop joint programmes with United Nations agencies and other programmes in the sustainable industrial transformation of those forest products.

F. Freshwater resources

39. While there is no international convention on the protection or use of freshwater resources, the demand on global freshwater resources is becoming an increasingly prominent preoccupation. The fifty-second session of the United Nations General Assembly will consider the issue of global freshwater resources, and the Administrative Committee on Coordination (ACC) Subcommittee on Freshwater Resources has been mandated by CSD to prepare a global freshwater assessment for the period up to the year 2025, to facilitate the deliberations of the General Assembly. As reported previously, the role of UNIDO is to develop an assessment of freshwater resource consumption by industry that will be provided to the ACC Subcommittee.

40. Utilizing its participation in the ACC Subcommittee, UNIDO is also developing an industry freshwater conservation programme, which will adopt a three-pronged strategy, covering:

(a) Analytical services that will provide an assessment of water consumption by industry subsector and country, projections of industrial water demand given economic growth projections, and analyses of existing pricing structures;

(b) Promotional services on the basis of water conservation potential to demonstrate/promote changes in technology (i.e. its economic efficiency) and management practices required to improve water conservation in industry;

(c) Services to the development of industry and water supply infrastructures that would assess weakness in water supply infrastructure, design, promote and standardize equipment for overcoming gaps and involve industries and various levels of public authorities.

In doing this UNIDO will coordinate efforts with all concerned members of the ACC Subcommittee.

G. Conclusion

41. In concluding this chapter, it is relevant to underscore the importance of GEF to the implementation of some of the conventions and agreements just discussed. The GEF is the financing facility for UNFCCC and the Convention on Biodiversity, two conventions for which UNIDO can develop significant programmes. As of now, UNIDO has two operational projects funded by GEF, worth $6.6 million. Those projects are in the areas of protection of international waters and preservation of biodiversity. UNIDO has submitted four pipeline projects to UNDP for GEF funding, for a total value of $15.13 million. The pipeline projects are in the areas of biodiversity, climate change (two projects) and protection of international waters.

IV. INDUSTRY AND INTERNATIONAL ENVIRONMENTAL NORMS AND STANDARDS

42. While the Uruguay Round of Agreements is widely recognized as offering unprecedented opportunities for liberalized trade, one of the most significant challenges for participation in the global economy is the need for adjustment to the technology requirements of international markets. In many cases, technical limitations may pose involuntary non-tariff barriers or marketing barriers that constrain opportunities afforded to enterprises in developing countries. Especially for the European market, the requirement for third-party certification of ISO 9000 is becoming one of the most evident technical compliances. The wide scope of these standards is affecting mainly small and medium enterprises that already apply many required procedures on an informal basis. The large amount of human and financial resources required to comply fully with ISO 9000 requirements is intimidating to entrepreneurs.

43. In addition to the quality system-related concerns, UNIDO is following the ongoing efforts of industrialized countries to promote eco-labelling and environmental management systems. The sheer number and diversity of the various aspects of eco-labelling is overwhelming.

The numerous national initiatives, primarily government sponsored, began when the Government of Germany introduced "Blue Angel" eco-labelling in 1978. It now covers more than 3,500 products in almost 80 categories. Canada was the second country to initiate an eco-labelling scheme, called "Environmental Choice Program", in 1988, and Japan launched its "Eco Mark" scheme in 1989. There are now approximately 20 national eco-labelling schemes world-wide including those in several developing countries, such as the Republic of Korea ("Ecomark"), Brazil ("Green Seal") and Singapore ("Green Label"). The European Union (EU) has developed an eco-labelling scheme intended to replace the national labelling programmes of its member States, which is now being implemented.

44. The growing diversity of activities related to environmental management and the need for a wider government involvement, as well as the success of the ISO 9000 series on Quality Management Systems, also encouraged the International Organization for Standardization (ISO) to enter the field of environmental management. In 1991, ISO and the International Electrotechnical Commission created the Strategic Advisory Group on the Environment (SAGE), a panel of experts from member countries. Those experts considered whether international management standards would be instrumental in:

(a) Promoting an approach to environmental management similar to the approach for quality systems;

(b) Enhancing an organization's ability to improve its environmental performance and to measure the improvement;

(c) Facilitating trade and the removal of trade barriers.

The Technical Management Board of ISO followed the recommendations of SAGE and created the Technical Committee 207 (TC 207) in 1993 to develop international management standards (ISO 14000 series), the draft of which is expected to be released by the end of 1995.

45. From the foregoing, it is clear that continuous and complex challenges need to be faced by developing countries to maintain an adequate level of participation in foreign markets. In addition, competition will also increase in the local markets as a result of quality of goods and higher productivity levels attained in industrialized countries.

46. UNIDO has already taken up industry subsector-specific examination of problems arising from eco-labelling schemes. In the case of the leather and leather products industry, the UNIDO Leather Panel requested the Organization to take up an examination of the issues in this sector. UNIDO prepared a technical study on the incidence and types of eco-labelling employed in the subsector. The study was presented to the Leather Panel, and UNIDO has been requested, together with international industry associations:

(a) To draw up internationally acceptable technical guidelines for eco-labelling schemes that could ensure neutral comparison among various national and regional standards;

(b) To develop an approach toward and provide technical support to technical service institutions in developing countries, that could provide the analytical, technical, and certifying services to award eco-labels to enterprises and products in developing countries.

The example of the leather industry will be explored for its applicability to other subsectors, such as the textiles and garment industry.

47. In October 1994, UNIDO convened an expert group meeting to examine issues on an industry-wide basis. That expert group meeting discussed the potential effects of ISO 9000 and ISO 14000 series of standards as well as the effects of eco-labelling on the trade of developing countries. UNIDO will examine the conclusions of this meeting and, based on its studied position, will develop a suitable follow-up technical cooperation programme for the 1996-1997 biennium.

V. ACTION REQUIRED OF THE CONFERENCE

48. In the previous chapters, the present document described the priorities of the UNIDO environment- and energy-related programme and the approach of the Organization, which links its technical support to its analytical capacities and international policies and trends. The General Conference may wish to:

(a) Endorse the priorities set out in the present document;

(b) Encourage the donor community to increase funding of the priority programmes and projects identified in the present document.

Notes

1. See GC.6/5, para. 150; IDB.14/10, chap. II.A.4, para. 102; IDB.14/13, para. 55.

2. See IDB.14/10, chap. II.A.4, para. 101.

3. See IDB.13/10, para. 97; IDB.13/12, para. 130; IDB.14/10, chap. II, A.4, para. 96; IDB.14/13, para. 59.

4. Cf. IDB.13/12, paras. 128-129; IDB.14/10, chap. II.A.1, paras. 5, 12, 13, 17, 18, 24 and 25.

5. See IDB.13/12, para. 151; IDB.14/13, paras. 71-75.

6. "Blueprint for Clean Industry - Conclusions and recommendations of the ESID Ministerial Conference", para. 28 (b), (PI/III/Rev.2).

7. Article 2: "Objective of the UNFCCC".